NEIL GAINS

Brand esSense

Using sense, symbol and story to design brand identity

CONTENTS

Introduction

> *If I eat pink cake, the taste of it is pink.* JEAN PAUL SARTRE

In 2012, Cadbury finally won a lengthy court battle to trademark their distinctive purple colour for packaging milk chocolate. They first applied for the trademark in October 2004, registering their own right to use Pantone 2685c, but their rival Nestlé had argued that colours could not be practically trademarked for commercial advantage. Why such a fuss about a particular shade of the colour purple?

Cadbury's purple is a distinctive asset for the brand, with huge importance in making Cadbury memorable and recognizable to customers, hence building mental availability and commercial value. The *Guardian* (2 October 2012) reported the appeal judge's verdict as, 'the evidence clearly supports a finding that purple is distinctive of Cadbury for milk chocolate'. The judge added that Cadbury had used purple for its Dairy Milk chocolate bars since 1914.

The ruling means that the particular shade of purple has become specific to milk chocolate bars and tablets, milk chocolate for eating and drinking chocolate, delighting Cadbury. The *Guardian* also quoted a Cadbury spokesman as saying, 'Our colour purple has been linked to Cadbury for more than a century and the British public has grown up understanding its link with our chocolate'.

Unsurprisingly, Nestlé retaliated in 2006 by filing a trademark application for the distinctive four-finger shape of Kit Kat, which they won earlier this year (reported in the *Daily Telegraph* on 2 January 2013). In similar applications, Christian Louboutin has secured the trademark for the distinctive red that marks the soles of the shoes he designs, Harrods has secured its own distinctive shade of green, and Tiffany owns the rights to the distinctive egg shell blue which wraps every package coming out of their stores.

Building successful brands is about building availability: physical availability in the marketplace and mental availability in the mind (Franzen and Bouwman, 2001; Sharp, 2010). Byron Sharp defines physical availability as 'making a brand as easy to notice and buy as possible, for as many consumers as possible, across as wide a range of potential buying situations as possible' (2010: 196). He adds that this includes retail penetration, store presence, hours of availability and facilitation of purchase. This definition is close to the famous quote from Robert Woodruff (1923), former Chairman of Coca-Cola, that his brand should be 'always within an arm's reach of desire'. The company's channel and distribution strategy reflects their continuing focus on physical availability.

Byron Sharp defines mental availability, also called brand salience, as 'the propensity for a brand to be noticed and thought of in buying situations' (2010: 191). He points out that salience is much more than simple top-of-mind awareness, and is a more general reflection of the network of associations with the brand in a buyer's memory. The larger and 'fresher' this network of memories is, the greater the chance that the brand will be noticed across different buying situations. This depends on the quantity and quality of those associations, and quality comes from distinctive and consistent icons, imagery and experiences that are relevant to the brand and the buying contexts.

This book focuses on building availability in the mind through quantity and quality of associations. These associations are built using experiential clues that send a consistent and strong message to the minds of customers and prospects, maximizing the signal and minimizing the noise that reaches consumers.

The messages are built around the brand's core values (esSense), combining the brand story with symbols and sensory cues that unify, simplify and amplify those values, creating an impression that is far more than the sum of the individual parts.

Sense, symbol and story

The American Marketing Association has defined sensory marketing as 'marketing techniques that aim to seduce the consumer by using

his or her senses to influence feelings and behaviour'. Although this captures the importance of non-functional aspects of experience, I prefer the Wikipedia definition (from the article 'Sensory branding', 4 April 2013), which says,

> 'Sensory branding is a type of marketing that appeals to all the senses in relation to the brand. It uses the senses to relate to customers on an emotional level. Brands can forge emotional associations in the customers' minds by appealing to their senses. A multi-sensory brand experience generates certain beliefs, feelings, thoughts and opinions to create a brand image in the consumer's mind'.

Much has been written about the importance of sensory marketing, and brands are starting to wake up to the vital role that the senses play in building brand identity. The majority of brand communication continues to focus on the visual appearance of brand experience; although sound and smell are often much more effective in engaging the human senses and emotions, and even images are more distinctive when they are matched with a second sense.

Although there is general agreement that multi-sensory experiences create stronger engagement and more powerful memories (Hill, 2008; 2010), relatively few books or articles have addressed how and why this can be achieved. Certainly the most famous, and a pioneer in the field, is *Brand Sense* by Martin Lindstrom (2005, second edn 2010). In the book, Lindstrom introduces his test of the 'smashability' of a brand's sensory signatures, based on the iconic story of the creation of the Coca-Cola bottle.

Lindstrom's book is full of examples of sensory branding, using the results of a Millward Brown research study to focus on some of the most successful examples of sensory marketing, including Coca-Cola, Singapore Airlines, Apple and Disney. Singapore Airlines is certainly a case study close to my heart, as I live in Singapore and I love travelling with them. Much has been written about their success, both in terms of their business model and their experience design (Rolls, 2006; Lindstrom, 2010).

Lindstrom takes a traditional view of the senses, focusing on the classical five senses of smell, taste, touch, hearing and vision, as many other authors do. Before his breakthrough book, a few authors had

addressed the importance of sensory engagement, primarily through the lens of customer experience management (Schmitt and Simonson, 1997; Schmitt, 1999; Pine and Gilmore, 2011; Gobé, 2009; Jackson, 2003). All of these works describe sensory marketing as a part of the total customer experience.

Following Martin Lindstrom's work, other books and articles have looked at different aspects of sensory branding, although often through an academic lens or a specific focus on one of the senses (Brynie, 2009; Hultén, Broweus and van Dijk, 2009; Krishna, 2010; Lusensky, 2011; Treasure, 2011). Dan Hill (2008, 2010) has also written about the importance of the senses in the context of building emotional salience. Most recently, Aradhna Krishna has summarized much of the academic literature on sensory marketing in a more business friendly form (Krishna, 2013).

Most of the published work on sensory branding and marketing focuses on the importance of the senses in creating customer engagement, with less emphasis on the symbolic value of sensory experience in creating brand meaning. The topic of brand meaning has often been left to the more academic world of semiotics, although some authors have tried to make these ideas accessible to broader audiences. Marcel Danesi, in particular, has written many articles and books explaining semiotic thinking and its application to the meaning of brands in layman's language (Danesi, 2006, 2007, 2008).

Virginia Valentine was a tireless champion of the application of semiotic thinking in market research, and Laura Oswald (2012) has written about the application of semiotics in marketing. Mark Batey manages to cover aspects of perception, semiotics and storytelling in his book *Brand Meaning* (2008) which is both scholarly and very wide ranging in the range of topics, ideas and theories that are covered.

Storytelling has now become a very popular topic for business and branding literature, with an avalanche of books on storytelling in branding over the last 12 months (for example: Cooke, 2013; Gottschall, 2012; Sachs, 2012; Signorelli, 2012; Smith, 2012; Sykes, Malik and West, 2013). Is there a pattern here, with so many surnames that start with an 'S'? The ability of brands and businesses to tell relevant and engaging stories is fundamental to success.

Building brand esSense

Although brand experience, brand meaning and brand stories are often discussed as separate elements of marketing strategy, is there a common ground between them? Experience, meaning and story are different manifestations of a brand's core essense. Simon Sinek has written convincingly about the importance of 'why?' in defining business strategy, and his TED talk has been watched by almost 10 million viewers as I write this (in late March 2013). In his book *Start With Why* (2011), Sinek writes about the golden circle of why, how and what and I have taken the liberty of adapting the circle to express brand essense in terms of the underlying brand story, the meaning of the brand and the brand's physical presence.

FIGURE 0.1   Golden circle of brand esSense
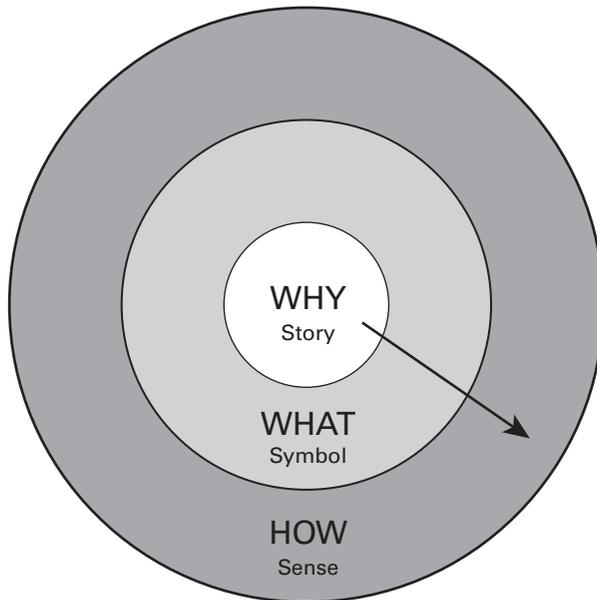
Sensory branding speaks to the most direct and physical manifestations of a brand. However, the physical experience of the brand must reflect the meaning of the brand to customers, which in turn is ultimately defined by an underlying brand story.

To rephrase this, story helps define why a brand exists, symbols help communicate a brand's meanings, and the senses help a brand to make these meanings real and tangible through direct engagement with customers. Sense, symbol and story define the physical, cognitive and emotional value of a brand to consumers, and are intimately linked in shaping the way that brands are perceived.

Language itself has limited impact on brand perceptions and it is well understood that the brain 'thinks' primarily in images and not words (Zaltman, 2003). However the two are intimately linked and Benjamin Bergen argues strongly that experience comes before language. He writes, 'Maybe we understand language by simulating in our minds what it would be like to experience the things that the language describes' (2012: 13).

The story of Brand esSense

Chapter 1 of *Brand esSense* describes the reality of perception, revealing the importance of expectations in shaping how we experience the world around us with profound implications for brand management. Chapters 2 and 3 describe the senses in detail; starting with those senses which experience the world close up, and moving to those senses that can help us perceive the world from a distance. Chapter 4 describes the world of symbols and signs, and how brands can interpret and leverage these to create meaning. Chapter 5 describes the importance of story in creating meaning for humans and references models of evolutionary psychology, emotion and behaviour that relate to customer goals. Chapter 6 builds on the importance of story, outlining 12 archetypal brand personalities that tell the stories of the most common customer goals. Chapter 7 details the process by which a brand can identify and realize the most relevant archetype for their category and customers. Finally, Chapter 8 integrates sense, symbol and story into the esSense framework, providing examples of 30 brand touch points and how they can be leveraged to build brand identity.

When combined, sense, symbol and story create a complete picture of a brand and its role in a consumer's life. Story links directly to

consumer goals that are the most important motivation for using any brand. Successful brands align their brand story with customer goals, and then ensure that the brand's symbols and sense (experiential) cues are consistent with them. Customer goals should be at the heart of the meanings and experiences that any brand seeks to build.

Successful branding comes from understanding customer goals and linking these concretely to the stories, symbolism and experience of using the brand. I hope you enjoy reading how sense, symbol and story can work together to bring your brand the success it deserves.

01 The reality of perception

> " *Life is not all that*
> *we think it*
> *is, it's only what we*
> *imagine it to*
> *be and for us*
> *what we imagine*
> *becomes*
> *mostly so.*
>
> **CHARLES BUKOWSKI**

Signal and noise

The world rushes past us every second of every day. How much do we take in? It has been understood for many years that we are consciously aware of very little of what happens around us. In the words of Professor Manfred Zimmerman, 'What we perceive at any moment, therefore, is limited to an extremely small compartment in the stream of information about our surroundings flowing in from the sense organs' (Nørretranders, 1999: 124–26; Zimmerman, 1989: 166–73).

Professor Zimmerman has written elsewhere that the maximal conscious information flow from sensory perception is around 40 bits per second (Zimmerman, 1986; Nørretranders, 1999: 124) and other estimates vary from 16 to 50.

This is in contrast to the millions of pieces of information that flood into the brain from our senses. Our eyes send at least 10 million bits of information to the brain every second, the skin around 1 million, the ears 100,000, smell 100,000 and the taste buds a much more limited 1,000. And Professor Zimmerman estimates that we are conscious of no more than 40, containing very little information compared with the richness of the world.

Professor Zimmerman has gone further to estimate the 'conscious' bandwidth of each of the five classic senses as in Table 1.1. Although visual perception dominates the total amount of sensory information, the table highlights the importance of hearing and touch in our conscious perception of the world around us.

Every second, many millions of pieces of information are being 'compressed' into a tiny handful that we might be aware of. All of this compression happens outside our consciousness. Language can never possibly capture the richness of our individual experience of the world through our senses, but it can capture those things that we are consciously aware of, raising a number of questions about the difference between the real world and our perception of the world. Are we conscious of the most important things that are happening around us? How much information about experience is stored in

TABLE 1.1 Information flow in sensory systems and conscious perception

Sensory system	Total bandwidth (bits/second)	Conscious bandwidth
Eyes	10,000,000	40
Ears	100,000	30
Skin	1,000,000	5
Smell	100,000	1
Taste	1,000	1

SOURCE: Zimmerman, 1989: 172

our unconscious brain outside awareness? Is there any way to access this unconscious information?

Much of what we perceive, learn and understand remains unspoken, and is written into the mind in the language of the senses. That said, it remains true that even the briefest piece of spoken or written language can often capture a rich network of ideas and associations. This is something that great storytellers and great brands have always known. When Carl Jung (1968) published a study of Hans Christian Andersen's fairy tales he wrote, 'Any viable work of poetry (and work of art in general) rests on archetypal foundations'. The power of archetypes in great stories is their ability to tap into a rich vein of unspoken associations, in the same way that our limited conscious memory taps into the rich vein of our experienced world.

The capacity or bandwidth of our conscious mind is limited to around one millionth of the capacity of our body to sense the world around us. Yet the world appears rich, detailed and coherent to us. How does this happen?

Patterns in the world

Although the unconscious brain processes a huge amount of information, it can only do this by simplifying. In essence, the brain is a very sophisticated pattern recognition machine and scientists from a wide range of disciplines have written about this in the context of the role of expectations, the relationship between mind and brain, artificial intelligence and empirical studies of visual perception (Berdik, 2012; Frith, 2007; Gregory, 2009; Hawkins, 2005; Purves and Lotto, 2011).

Our brain does not trawl through every piece of information coming from the senses. Rather, it uses very fast, highly intelligent and constantly adapting algorithms to search for meaningful patterns in the world. Meaningful in this sense is the ability to help the brain predict future events and adapt to a changing environment with successful strategies that are likely to lead to positive outcomes.

There are more than five senses, but in some respects the brain sees only one sense. All sensory data arrive as patterns of information for the brain to check, filter and build into hypotheses about the world

outside. Most sensory information has undergone a great deal of processing before we are conscious of it and this processing happens at different levels in the brain, some much quicker than others.

For example, if my unconscious brain notices a suspicious object in the grass that is long and thin, I may immediately stop or even start to take flight before I am fully conscious of anything at all. Later, my brain will fill in the details, perhaps finally working out that it's a branch of a tree rather than a dangerous snake. But all that happens after I have already taken evasive action.

Our brains are constantly trying to spot patterns in the world. In the Second World War, the bombing of London was random, but somehow experts were able to pick out clusters and patterns in the randomness, just as we can all see faces on the Moon's surface (this effect is called the Law of Prägnanz and is one of the principles of Gestalt psychology). That's why expectations play such a large role in sensory perception.

The best-known example of the role of expectations is the placebo effect, documented across hundreds of studies. The placebo effect is largely attributed to a combination of expectancy and classical conditioning, and some of the most recent and interesting studies of placebo and expectations have been those documented by Dan Ariely and co-workers across a series of experiments (Shiv, Carmon and Ariely, 2005; Lee, Frederick and Ariely, 2006; Ariely, 2008).

In one experiment, Ariely and colleagues demonstrated that members of a fitness centre worked out less and were more fatigued when they had purchased a reduced-price energy drink compared with when they had purchased a full-price energy drink. That is, price discounts led to a behavioural effect (marketers take notice).

In further experiments, Ariely and co-workers investigated intrinsic expectation effects (eg an active drug 'should' work) and extrinsic expectation effects (eg injections and capsules have different levels of effect) as well as the role of existing beliefs (eg brand name, ingredients) and new knowledge (eg price). They demonstrated in three follow up studies that:

- Participants solved fewer puzzles when given a discounted energy drink compared with a full-price drink (and they were unaware of the effect).

- This effect was eliminated if participants' attention was drawn to the link between price and efficacy.

- The same effects could be seen when participants were given new information about the efficacy of the drink (ie additional marketing information) and this was independent of the price effect.

In a separate experiment, Ariely and co-workers were able to repeat the price effects on the efficacy of a drug, with reduced price drugs providing a lower level of pain relief. The significance of these studies and others is that it proves that price not only affects perceptions of quality, but also influences *actual* quality. That is, changes in price can actually change the experience of a product.

This was proved in a more entertaining experiment with beer, where the addition of small amount of balsamic vinegar to a beer increased preferences for it when tasted blind. However, when participants were informed before tasting the beer, their preferences switched. In a follow up experiment, Ariely and co-workers tested whether the information was just another input variable to participants' judgments or whether it had actually changed perceptions. They found that the timing of the information was very important, and if the information was given after the beer had been tasted, then preferences were much closer to the blind experimental condition. Thus, it was not the information which had changed the preferences, but the experience of drinking. The information had the effect of profoundly changing experience.

In the next chapter you will read of many instances when our brains can be fooled by our senses, most frequently in the visual illusions that are common in psychological literature. The point is not to prove how easily the brain can be fooled, but rather to demonstrate the fundamental role of prior information in shaping our experience of the world. We experience what we expect to experience, not what is really out there.

Behavioural economists refer to effects like the beer experiments as 'priming' (Kahneman, 2012). They are the reason that you rate someone as more friendly after being given a warm drink compared with when you are given a cold drink; why you are more flexible in negotiations when sitting in a soft chair rather than a hard chair;

and why even wine experts can be fooled into describing white wine as 'rounded' and 'red fruit' when a small amount of red colouring is added.

Perception is an active construction

Our vision seems vivid and real, and directly related to the things we see around us, but perhaps this is one of the greatest visual illusions of all. Is vision passive or does it actively construct a version of reality from small pieces of evidence?

Richard Gregory (1998) believes that our vision and other senses have evolved from passive responses (ie reception) to active constructions (ie perception). Our perceptions are hypotheses about the world around us, probabilistic computations designed to help our embodied brains maximize the effectiveness of our behaviour as we navigate our environment, our cultures and relationships with the other people around us. As Gregory puts it, 'perception is a bunch of guesses'.

In the 17th century, John Locke (1632–1704) and Sir Isaac Newton (1642–1727) argued that colour is created in our brains and that light and objects do not have colour in themselves. Colour only exists through the interaction of light with objects, in terms of which parts of the light spectrum are absorbed or reflected by an object. George Berkeley (1685–1753) believed that we do not really see shape and space at all, but we feel them in the sense that we see coloured 'patches' and associate these with shapes and spaces through our experience of the world, much like the experience of a Cézanne painting with its rough shaped splashes of paint forming a vision of a mountain (Locke, 1979; Berkeley, 1922; Hume, 1993; Gregory, 2009; Hoffman, 1998; Frith, 2007; Purves and Lotto, 2011). Berkeley was far ahead of his time, and in the 21st century we know where the sensation of colour is produced in the brain, but we still do not understand how this happens. Similarly, loudness is just the sensation created by moving air. So are the perceptions of colour and sound an illusion? Why does the sky look blue and thunder sound loud?

The world we see is really a construct of our brain, which does not produce a picture or video image in the way a camera does, but

actively creates a model of the world from the information provided by the different modules of the senses. In the case of vision this includes light and shade, edges, curvature and many other sensations. Integrated together, all these pieces of information allow the brain to 'fill in' the blind spot in the middle of our eyes (the part of the retina where the optic nerve joins the brain), compensate for the rapid eye movements ('saccades') that our eyes makes around five times each second, and still produce a steady and coherent picture of the world around us. Consider how we can 'see' in a dark room, where the colour receptors in our eyes do not function at all. We are still able to recreate a coloured world based on our memory of experiences in daylight.

In *Visual Intelligence* (1998), Donald Hoffman discusses how our eye and brain interact to put together 'patches of colour' to see a coherent picture of the world. The fundamental problem of perception is that any image on our retinas is not unique and can be interpreted in countless different ways. Hoffman argues that we all build a set of visual rules of thumb through which construct our visual world.

The perception of depth and distance demonstrates how the brain uses such rules to predict the reality of the world outside. Although depth perception is often considered a result of binocular vision, this plays a lesser role than monocular vision in how we perceive distance. Here is a non-exhaustive list of the clues that are used in determining depth, with only the last three dependent on having two eyes (Gibson, 1950; 'Depth perception' article from Wikipedia, accessed on 4 April 2013):

1 **Relative size** of objects known to be similar provides clear evidence of relative depth or distance.

2 **Familiar size** of objects helps the brain determine distance based on the object's size on the retina. That is, our brain knows the size of cars and people and can extrapolate distance based on perceived size.

3 **Perspective** gives clues based on the brain's experience that parallel lines converge in the distance at infinity.

4 **Motion parallax** depends on the relative motion of stationary objects against a background when we move as observers to give clues about distance.

5 **Depth from motion** gives clues based on the changing size of objects when observer or object are moving.

6 **Aerial perspective** uses the lower luminance contrast and saturation of distant objects (due to light scattering in the atmosphere) to determine the 'distance fog' and, therefore, likely depth. For example, Cézanne and other painters used 'warm' pigments (red, orange, yellow) to bring features nearer the viewer and 'cool' pigments (blue, green, violet) to make features recede into the distance.

7 **Accommodation** is based on feedback from the eye's muscles, which contract and relax when looking at short distances in order to make the eye lens thinner.

8 **Occlusion** is based on the knowledge that objects closer to you block (or occlude) objects that are farther away, allowing the brain to create a ranking of objects in the distance.

9 **Curvilinear perspective** is based on the curving of parallel lines at the extremes of visual perception, giving the brain clues about our position in three dimensions.

10 **Texture gradient** uses the fact that we can perceive the details of near objects much more clearly than those of more distance objects. For example, we can see the details of nature (size, shape, colour) with much more clarity in the near distance than farther away.

11 **Lighting and shading** are used to determine distance from the way that light falls on an object and reflects off its surfaces.

12 **Defocus blur** is used to determine depth as there is less focus and more blur the farther an object is from us.

13 **Elevation** gives clues as to the position of an object relative to the horizon, with those closer to the horizon farther away from us.

14 **Stereopsis** is the use of the information from both eyes to infer distance based on the relative size and angle of the image in each retina.

15 **Convergence** happens as both eyeballs focus on an object, allowing the brain to infer distance based on the feedback from the muscles in the eyes.

16 **Shadow stereopsis** uses disparities in the perception of
    shadows across retinas to infer depth.

James Gibson's comments from 1950 on the importance of binocular
vision are still relevant today, and should be compulsory reading for
the advocates of 3D cinema and television:

> It has been commonly believed for many years that the only important
> basis for depth perception in the visual world is the stereoscopic effects
> of binocular vision... It is the belief of photographers, artists, motion
> picture researchers, and visual educators that a scene can be presented
> in true depth only with the aid of stereoscopic techniques... This belief
> is based on the assumption that there exists a class of experiences
> called innate sensations. With the increasing tendency to question
> this assumption in modern psychology, the belief is left without much
> foundation. Depth, we have argued is not built up out of sensations,
> but is simply one of the dimensions of visual experience.

The brain has many clues that it uses to make predictions based on
limited (and often corrupted or conflicting) sensory inputs. The
process of perception is efficient and based on years and years of
experience. The downside of these (highly efficient) rules of thumb
is that it is very easy to fool our eyes. TV, films and optical illusions
work by misleading the brain about what is out there. This is why
the Moon appears larger than it really is, and varies in size when its
real size is about the same as a hole made by a hole punch held at
arm's length. It is also why we see films as continuous and moving,
although they are only composed of 24 images each second, and why
we hear actors speaking from their mouths, although the sound is
coming from the speakers behind us.

These processes are also the basis of many visual illusions and magic
tricks. Richard Gregory spent his life studying visual illusions in order
to understand how perception works, and the hollow face illusion
described by him is a perfect example of the paradoxes of perception.
You can see the illusion by searching for 'hollow face illusion' on
YouTube. It shows the power of prior probabilities, in the best sense
of Bayesian statistics. Humans are experts at interpreting faces, as
we see thousands of different faces from different angles throughout

our life, and all of those faces are convex. Therefore, when the brain sees a stimulus that is concave, it overrides the information from the senses, which clearly do not make sense, and interprets the information as a normal convex face (Gregory, 2009: 127–29).

The majority of other illusions work in this way. One of the most famous is the Müller-Lyer illusion, which consists of a stylized arrow. When viewers are asked to place a mark on the figure at the midpoint, they invariably place it more towards the tail end. Franz-Carl Müller-Lyer devised the illusion in 1889. A more common variation of the illusion consists of a set of arrow-like figures, with straight-line segments comprising the shafts of the arrows, while fins protrude from the ends of the shafts (see below). The fins can point towards or away from the shaft, forming a head or a tail to the arrow. The line segment with two 'tails' is perceived to be longer than that with two heads ('Müller-Lyer illusion' article from Wikipedia, accessed on 4 April 2013). You can see the illusion in Figure 1.1.

FIGURE 1.1   Müller-Lyer illusion and perception of interior space
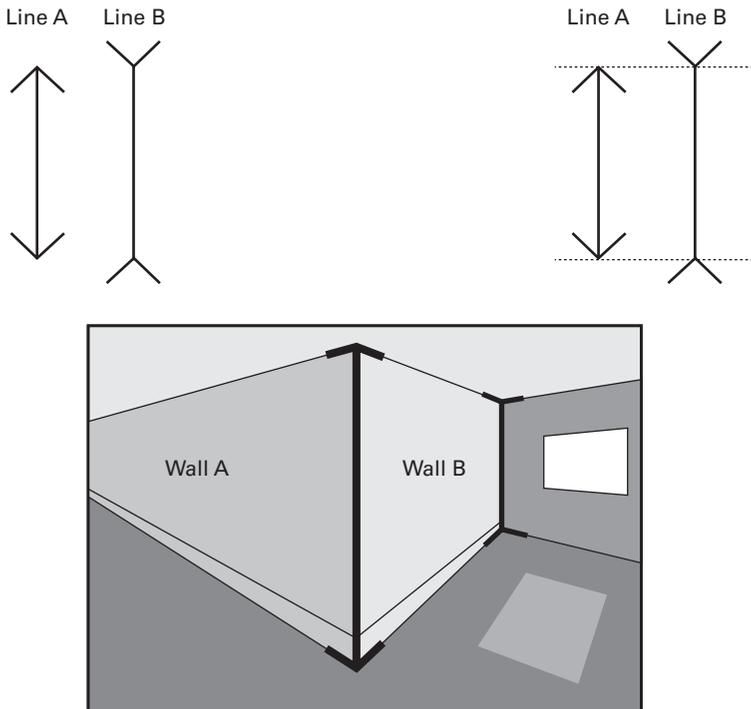
Richard Gregory hypothesized that the basis of this illusion was the brain's interpretation of depth and distance (perspective), and that the lines in or out are interpreted as signalling a three dimensional object. You can see this in the visual of an interior space in Figure 1.1.

Gregory's theory may or may not be true, but it has been demonstrated that the illusion varies across culture and age groups and, specifically, that the illusion is more powerful for older people brought up in more urban areas, where there are a lot more 'straight line' three-dimensional objects in the environment, and less powerful for younger children and those from rural areas. Whatever the reasons, it is clear that differences in the environment lead to differences in perception. Perception is learnt from experience.

The reality is that although the senses work from the bottom up, providing a rich source of information about the world, our perception is driven by top-down knowledge. This is the progression of evolution, from a simple bottom-up view of the world, to a sophisticated bottom-down view that uses a vast databank of information to make highly informed predictions. Our experience of the world has developed from 'reception' to 'perception' over millions of years. That's why we need such a large and interconnected brain, which uses far too much of our body's energy to make sense unless it can help us to survive, reproduce and lead successful lives.

Nature and nurture

How much innate knowledge of the world do we have? Neonate babies already know to respond to faces and to like sweet tastes and avoid sour ones. As adults we have learned to like both, using both prior knowledge and learned behaviours.

In 1955, George Kelly published his *Theory of Personal Constructs*, an original theory of personality based on the concept that there are many alternative solutions to the way in which any of us construct our world. His basic premise is that our perception of the world is guided by the way we anticipate what will happen, rather than how we react to it. This is again a more active, rather than passive, view of perception and behaviour.

Kelly coined the term 'constructs' to label the dimensions through which we structure the world. The way Kelly sets out his theory in postulates reflects his background in physics and mathematics before he moved into aviation psychology in the Second World War and ultimately into psychotherapy.

He saw humans as naïve scientists who see the world through their own lens and based on their own unique system of constructs. These constructs are only useful as far as they help us to anticipate future events, and in mental illness they have often been distorted by experiences that are atypical of normal social situations.

This view has been incorporated into many subsequent theories including cognitive-behavioural theory, and was a reaction against earlier theories that focused on drives or behaviour only, most especially those of BF Skinner. Importantly, Kelly took a less deterministic view of human behaviour, and was also driven by the need for reflexivity in psychology. It was important to him to be comfortable with describing his own behaviour in the same way as that of his patients. As Kelly put it,

> 'Theories are the thinking of men who seek freedom amid swirling events. The theories comprise prior assumptions about certain realms of these events. To the extent that the events may, from these prior assumptions, be construed, predicted, and their relative courses charted, men may exercise control, and gain freedom for themselves in the process' (1955: 22).

Kelly's constructs are bipolar categories, or as he put it, 'the way two things are alike and different from a third'. For example, 'attractive', 'intelligent' and 'kind' always imply a contrast with an opposite meaning, such as 'ugly', 'stupid' or 'cruel'. Bipolar constructs describe a mental world very similar to that of semiotic theory that will be discussed in Chapter 5. Just like semiotic theory, constructs are always context specific or in Kelly's words, each construct has a 'range of convenience'.

Humans who are well adapted are continually revising and updating their own constructs to match new information that they encounter through new sensory data. Kelly's theory and related repertory grid technique assume that you can understand an individual's world

view if you can understand the constructs that they use to evaluate the world.

Although the theory is abstract, the practical application is straightforward and has been used widely in clinical and commercial research. More importantly, Kelly's view of the process of evaluating experiences through a set of hypotheses in order to predict likely futures is consistent with the view of sensory perception discussed here.

Matching the right patterns

Perception is really a pattern matching system and memory is intimately linked to how we see the world. The brain uses past memories to predict future outcomes, and our perception of our any situation and our behaviour in response to that situation depend on which memories are used to match the current pattern.

It is well known that contextual cues are important in memory, which is why witnesses are taken back to the scene of the crime. In market research, it has been shown that placing people in a relevant environment improves the quality of their responses – you remember the names of more alcoholic drink brands when you are in a bar than when you are in a more artificial environment.

In one classic experiment, divers learnt lists of words in two environments, on dry land and underwater. They were later asked to recall the words in one of the two environments: either the original environment in which the words were learnt or in the alternative environment. Lists learnt underwater had higher recall underwater, and lists learnt on dry land had higher recall on dry land. The experimenters later proved that this effect was one of context-dependent memory and not related to the disruption of moving environments, as you can see in Figure 1.2.

Some companies have used these effects to their advantage. In *The Experience Economy*, Pine and Gilmore (2011) quote the example of Standard Parking of Chicago, who had a parking garage at O'Hare Airport. To help customers remember on which floor they parked their car, they play a different signature tune at each level of the garage, and decorated the walls with the icons of different local

FIGURE 1.2   Context and memory

Test enviroment
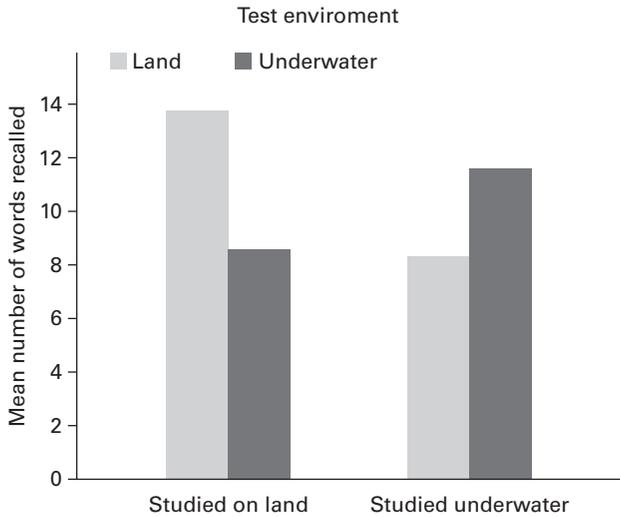
SOURCE: Godden and Baddeley, 1975

sports franchises, so the Bulls were on one floor and the Blackhawks on another. They quote one local resident saying, 'You never forget where you parked!' (Pine and Gilmore, 2011: 5).

Other studies have shown that memory recall can also depend on physiological state and mood state. Pamela Kenealy (1997) demonstrated that recall was dependent on mood state, although only for free recall and not cued (prompted) recall. In the study, participants looked at a map and learned a set of instructions about a particular route, until their performance on recall tasks exceeded 80 per cent accuracy. They were brought back one day later and given tests of free recall and cued recall on the visual outline of the map. It was shown that mood state effected memory, but only for free recall and not cued recall. Those induced into a sad mood had higher recall when in a sad mood on the following day, and lower recall when in a happy mood (and vice-versa) as you can see in Figure 1.3.

The brain is a prediction machine, and prediction of the future is and should be sensitive to mood state and environment. Our emotions and context are important determinants of what is appropriate behaviour. If you want your brand to be recalled, then create associations with the relevant emotions and contexts. As Dan Hill says,

FIGURE 1.3 Emotion and memory
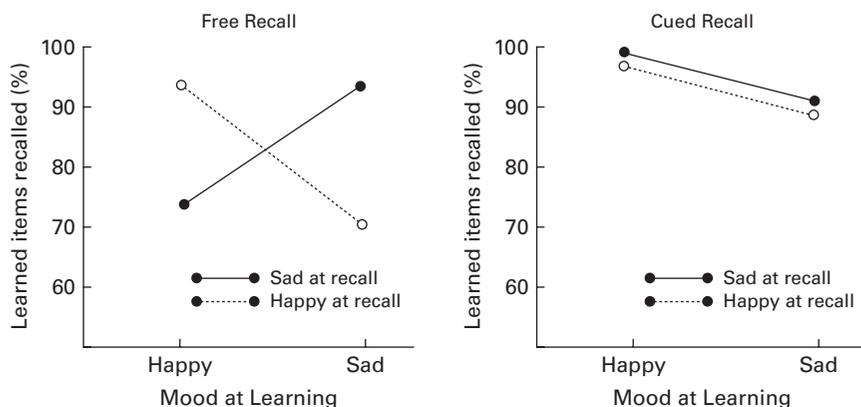
'be on-emotion (and not just on message)' (2010: 171). There are also some important lessons for market research here too: if you want to predict behaviour more accurately, ensure that your respondent is in the right place and the right mood.

Experience and memory

In *Thinking, Fast and Slow* (2012), Daniel Kahneman discusses the difference between our experience of events and what we remember later. They are not the same. We tend to remember only key parts of our experiences, and most especially the very first time we come into contact with someone or something ('priming'), the most extreme moments and the end of the experience ('peak-end rule'). In addition, our memory for individual events is much better than our memory of time ('duration neglect').

Kahneman discusses examples and experiments that involve the evaluation of pain. In one quoted experiment, participants were asked to hold their hands in painfully cold water (14°C). In one condition, participants were asked to do this for 60 seconds. In a second condition, participants were asked to do this for 60 seconds

and then for a further 30 seconds as the temperature was increased by one degree – enough to perceive a slight decrease in pain. Participants experienced both these conditions, with a break in between, and were then asked to choose which condition they would prefer to repeat. Eighty per cent of participants chose to repeat the second condition rather than the first.

Objectively, this does not make sense, but remember that our memory is different from our experience, and what we remember most are the extremes and end points, and not the duration of the experience. So participants' memory told them that the second condition ended better, and that there was no difference in the duration of the experience. Therefore it made sense to go for the second. Kahneman puts it, 'The experiencing self is the one that answers the question: "Does it hurt now?" The remembering self is the one that answers the question: "How was it, on the whole?"' (2012: 38). As he says later, 'the remembering self is sometimes wrong, but it is the one that keeps the score and governs what we learn from living, and it is the one that makes decisions. What we learn from the past is to maximize the qualities of our future memories, not necessarily of our future experience. This is the tyranny of the remembering self.'

How does this apply to brand experience design? First impressions last, as do final impressions, so it pays to focus on beginning and end points. It also pays to surprise customers occasionally or provide occasional 'big moments'. These are the parts of the experience that will be remembered and therefore will guide future decision-making.

Kahneman's overall metaphor for the mind is as a dual system, with System 1 fast, intuitive, automatic, implicit and uncontrollable and System 2 slow, deliberate, explicit and directed by our conscious minds. The subtleness of Kahneman's description of independent parts of a whole system is best captured in the comment by Rory Sutherland of Ogilvy Group UK, 'System 1 is the Oval Office and System 2 is the press office. Of course, System 1 is always ultimately in charge of what happens, whatever System 2 decides to say.'

Associating with the right memories

How does System 1 work? We all store different ideas associatively. If I hear the word 'banana' a number of things come immediately to mind:

1 A picture of a banana (it is after all a fruit);

2 A jingle from a late 1960s children's programme which I used to watch avidly every Saturday morning (Fleegle, Bongo, Drooper and Snorky sang the theme tune 'One banana, two banana, three banana, four' every week);

3 The shopfront of Banana Republic (which I happened to pass yesterday).

In turn these trigger a further set of ideas:

4 A banana split (the dessert made from banana);

5 The smell of banoffee pie (another dessert made from banana – you can tell I have a sweet tooth);

6 The tune of 'Banana Republic' by the Boomtown Rats.

Our memory works by associating ideas or concepts with each other, when they have any kind of association or there is an analogy between the ideas. Although some of these ideas are made concrete by words, many of them are sensory experiences triggered by a certain stimulus, such as a picture, a tune or a smell.

The process of association mirrors the more fundamental neuronal processes that are the building blocks of our memories and behaviours. Neuroscientists use the expression, 'fire together, wire together' to describe how neurons work, meaning that if one set of neurons, linked to a specific experience, fire at the same time as another set of neurons, linked to a separate experience, the brain learns that there may be some connection between the two events. The more often this happens (fire together), the stronger the association between the two events becomes, until eventually the connection is so strong that only one event is needed to trigger those neurons linked to the second experience (the events are wired together). This is the basis of conditioning, where

the body's behavioural response to one event comes to anticipate its response to a separate later event.

The associative basis of memory is why metaphors and archetypes are so powerful. Metaphors allow us to associate a rich vein of ideas and memories in our minds through one central 'idea', making that idea a powerful trigger of behaviour.

Gerald Zaltman (2003) has pioneered the use of metaphors in marketing and research, building on pioneering work in philosophy, psychology and linguistics (see also Lakoff and Turner, 1980). Zaltman argues that there are a number of 'deep metaphors' that are unconscious 'structures of human thought' and that these metaphors manifest themselves in surface metaphors used in everyday language. Furthermore, he argues that these metaphors can be used in marketing to communicate more effectively to consumers about a brand, product or topic using language that everyone can understand and appreciate.

Zaltman uses metaphors as the basis of his research to understand deeper beliefs and thinking patterns. He has written about seven fundamental metaphors that are common across cultures and categories: balance, transformation, journey, container, connection, resource and control (Zaltman and Zaltman, 2008). All are related to universal human traits, and our love of stories is really a love of extended metaphors. There are many common themes between these metaphors and the archetypes that will be the subject of Chapter 7.

Metaphors frequently use sensory terms, such as 'I see what you're saying' and 'I was touched by your words'. Many scientists have argued that the experience of synaesthesia is linked to the brain's use of analogy and metaphor, and that these processes are also deeply linked to creativity (Cytowic and Eagleman, 2011; Ramachandran, 2011).

Synaesthesia is much more prevalent among artists and poets than in the general population. For example, Wassily Kandinsky was synaesthetic, as was Richard Feynman, who was a highly creative scientist and bongo player and once described the experience of synaesthesia in this way: 'When I see equations, I see the letters in colours – I don't know why. As I'm talking, I see vague pictures of Bessel functions, with light-tan j's, slightly violet-bluish n's, and dark brown x's flying around. And I wonder what the hell it must look like to the students' (Ward, 2008: 11).

One theory of synaesthesia is that cross-wiring in the brain leads it to learn to associate one sensory impression with another from a different sensory modality. This means that the colour can help the brain predict the letter or word (or vice-versa). As we have learnt, the brain is above all a sophisticated pattern recognition machine, designed to make predictions about the world in order to optimize our behaviour to achieve the best possible outcomes. As Richard Gregory said more succinctly, '[Sensation] is a bunch of hypotheses'.

Perception, memory and action are all part of the same integrated system. We remember experiences that have meaning, in order to make future predictions by matching current perceptions to those past experiences. Meaning comes from predictive ability, emotional salience and context. Our senses help us create meaning, but they are far from perfect.

I will leave the final words of this chapter to Richard Gregory (2009) who wrote:

> We expect small things to be lighter than big things, to get smaller as they move away from us, and to grow larger as they get nearer... Though seeing and hearing and touch seem simple and direct, they are not. They are fallible inferences based on knowledge and assumptions which may or may not be appropriate to the situation. Listen to a tape recording of an audience clapping. In the kitchen, it sounds like bacon frying. In the garden, it sounds like rain.