

Multisensory

"Any designer who approaches a design challenge without looking at all of the senses is irresponsible." James Whittaker, creative director of strategic-creative consultancy Frog Design, could shock even the most visually-biased designer into an appreciation of the power of the senses.

Understanding how the brain interprets sensory cues certainly poses a challenge, but designers are increasingly being briefed by brand owners to create packs that use materials and shape to create strong emotional attachments to their brand. Doing it without abusing the consumer's senses is the trick, and an understanding of the inner workings of a consumer's brain could help.

Professor Charles Spence, cognitive psychologist from Oxford University's crossmodal research lab in the department of psychology, has the facts about the brain. He presents a multi-sensory account of human action and choice, which packaging designers should know about.

His work shows that, in the brain at least, your hands are connected to your ears, which send signals to your mouth, which takes information from your nose, which depends upon your eyes to tell it what it's sensing. A pack that looks appealing doesn't just seduce the eyes. It can make the mouth water and the hands expect.

"All our work tries to move away from the visual bias," says Spence. He investigates how the sensory organs send signals to the brain and how they are interpreted. "When you look a bit more closely at the brain, you see the integration of different senses. How the integration works can be used to go back to what the design could achieve."

Spence says that anyone considering the senses in isolation is missing a trick. "That whole approach is fundamentally wrong and all of the exciting stuff is going on in looking at how the senses can interact."

Super sensory stimulation

There are rules to understand about integrating sensory stimulation, says Spence. Combining stimulation of equal volume from two senses, for example auditory and visual, has a "super-additive effect" of enhancing sensory experience by as much as 1,207%. "But if you get the cues wrong, it will suppress senses," says Spence. A lot of visual stimulation and only a little auditory stimulation could result in diminished visual impact, of as much as 86%, says Spence.

Sympathetic multi-sensory integration is, then, the Holy Grail for both designers and brand owners. However, they all have different ideas about which senses make the biggest and best impact on consumers.

When shopping, Whittaker says, "people's instinctive reactions take over", and Spence agrees that how their senses are stimulated can determine many of their decisions. Whittaker says: "There are certain innate characteristics in humans that designers can exploit and capitalise on. Understanding how we work cognitively and how we are conditioned to respond is important. I think there's a whole world out there that designers should be exploring with scientists."

And remember, Spence says: "People often complain of a sensory overload. However, by this they are usually referring to visual or auditory overload. People rarely say, 'I have had too much touch today.'"

Pack designers are making us use our heads, seducing our senses with packaging that feels, smells and even sounds as good as it looks, writes *Tess Raine*

TOUCH

Frog Design's Whittaker thinks the sense of touch is under-used in design: "I think tactility is important, but it's severely limited by manufacturing capabilities. Until economies of scale are established it can be considered impossible."

Tin Horse design director Martin Bunce agrees that the feel and shape of a pack is vitally important to "experiential branding". He says: "Shape isn't just about how it looks but about how it feels in the hand." With the growth of CAD, Bunce says, designers are now able to explore different surface textures, but their ideas are often thwarted by the tightening purse strings of brand owners.

There are products available, however, to ease economic concerns about producing tactile packs. Sun Chemical lacquers, which feel rough or smooth, can be overprinted onto standard packs. Amcor Flexibles produces Hovis crustless bread packs using a soft-touch lacquer to suggest the softness of the bread inside.

The tactile lacquer's maker says that the market for products that stimulate the senses has not been as quick to take off as it expected. "The market has been slower than we thought, but I do think take-up will accelerate. Whether it will be as big as everyone thought it would be, I don't know," says Sun UK packaging division business development manager Barry Ferne.

SMELL

The market for smelly packaging is proving to be a slow starter. Perhaps that's because smell is one of the most emotive and memorable stimuli to the senses.

Coley Porter Bell creative director Stephen Bell says that it could have a big impact on packaging: "The sense of smell is one of the most powerful and advanced forms of human interaction with our surroundings, but one that has been often overlooked as a medium of communication." As about 75% of all the emotions we experience on a daily basis are generated by what we smell, Bell says that smell should be considered the most powerful sensory branding tool.

But Whittaker voices concerns that scented packs might seem gimmicky. "The question is, what value does it give to a purchasing experience? Or could it be irritating?"

Irritating or not, Professor Spence says that smell, out of all the senses, has the biggest physical impact on the brain.

However, Whittaker warns: "We are not in the situation where there are lots of scented packs. Scent can be memorable but, when we are surrounded by scents, it gets lost in the crowd." He admits the first brands to use scented packaging could make a big splash, but is it a lasting concept?

There are already products available for those wanting to make the splash. Rotuba has developed Auracell, a scented cellulosic polymer that is produced at relatively low temperatures so can encapsulate fine fragrances. "Incorporating scents can differentiate a company's product and increase its exclusivity," says Rotuba vice-president of operations Jim Blumenfeld.

appeal

VISION

Unsurprisingly, designers often think that the visual sense is dominant. Whittaker says: "I think visual is by far the most powerful medium of communication. The eye is supremely acutely aware of subtle visual differences and the human face is probably the best example of that."

Consumers are used to being visually assaulted or appealed to by packs and many make purchasing choices based on how a pack looks. But many don't realise the effect of what they see on their other senses. Spence gives examples of how what is detected by the eyes affects what we taste and hear, and this makes the eyes seem like thugs to our other senses.

As a result, packaging designers focus on these power-players. A pleasing shape, emphasised by sympathetic colours and graphics, suggests ease of use and life-enhancement. The eyes can deliver more information about what's inside the pack without opening it than the other senses. They can read information on the packs and, with technologies such as Plastic Logic's flexible plastic e-reader, packs with changing graphics could be a real possibility.

SOUND

Tin Horse's Bunce says auditory contributions can be powerful, even if they are subtle: "Your brain is picking up subtle cues all the time, which might be more informing," he says. Think about noisy packaging, such as crisp bags, which suggest noisy food. Crunchy, noisy packs make food seem fresher and better.

"It is interesting to think about specific examples," says Spence. "For instance, what sound gives the impression of a highly carbonated drink? Can you change the shape of the nozzle of a spray-can so it emits a different sound? You can create anticipation through the sound of packaging."

TOUCH AND SMELL

Smell can influence the perception of texture. Adding fragrance to a fabric can make it feel softer by 3-5%, says Spence. If the smell of a fabric softening detergent was added to packaging, the consumer could be experiencing this extra softness before they've even used the product. This, he says, could have particular significance in the detergents aisle of supermarkets, where Spence believes scented packaging could have its biggest effect.

VISION AND SMELL

The brain can confuse colours and smells. In an experiment, French oenologists, when asked to describe the smell of wine, used terms such as light and crisp for white wine. When asked to describe red wine, they said it smelled fruity and robust. But when smelling white wine laced with red food colouring they described it with the characteristic red-wine terms.

TASTE

Packaging, strange as it may seem, has the potential to influence our taste buds, says Spence. When 7-Up added 15% more yellow to the green on its cans, consumers reported the drink inside tasted more of lemon or lime. No change had been made to the flavour or the formulation of the drink.

