3 hidden neuroscience tricks behind Instagram's new logo

Instagram, the photo sharing app, has launched a new logo. Early reactions are dividing fans, but I believe it will become well-loved in the long run as it uses some clever neuroscience tricks to appeal to our subconscious minds.

Logos, particularly those of mega-popular apps like Instagram, become a familiar part of our lives. Changing them carries the risk of losing all that mental goodwill. Giants of the web don't have physical presence, like shop fronts; their logos and visual look have to do all the work. They have to appeal to us, be comfortable to look at, and emotionally engage us. To get that level of global appeal, with a design that might have to last years, it's not enough that a logo just appeals to us consciously, it must also have appeal to our subconscious minds.

For thousands of years artists, designers and architects have relied on beliefs about what creates a beautiful design. Yet these beliefs can become hardened over time into rules that may not actually be as effective as we think. For example, the Golden rectangle, a design favourite from ancient Greece onwards, when tested in research is found to be less effective than we thought [1].

This is where the new generation of neuroscience research comes in. For example, the company I work with, Neurostrata, has taken a number of lab findings on design from neuroscience, then tested out those ideas in the real world on real designs. We've tested everything from package designs for UK supermarket giant Tesco, to glossy print ads for magazines. The combination of neuroscience theories and published

research with real world testing on real designs is giving us a better picture of the types of design features that are most universally favoured. I call this new approach Neuro Design.

The new Instagram logo design is flatter, slightly more abstract than the original design. Some have reacted passionately against it, expressing their disgust on social media. Yet as a researcher who applies neuroscience research to designs, websites and packaging, I recognise in it 3 familiar techniques:

1. Visual saliency

Our world is full of things competing for our attention, yet our eyes can only focus on a relatively small area of our visual field at any time. To deal with this limitation our brains have evolved a way to prioritise what we should look at. Even before we've had the chance to properly decode and recognise what a design is, its visual features — colours, contrasts, brightness, patterns — will have been absorbed quickly and given a priority rating by our brain. Neuroscientists call things with high visual priority 'visually salient'. Designs that are visually salient get looked at earlier, more often, and for longer [2].

The new Instagram logo has high visual saliency. It's likely to get noticed. One of the drivers of visual saliency is high levels of colour contrasts in an image. The thick white line of the camera on the logo against the rich colourful background creates high levels of eye-catching visual saliency.

2. Propositional density

The logo also has another important quality: high propositional density. This is when a design is able to convey a lot of meaning with as little detail as possible. Images with high propositional density are easy on the eye, but

intriguing to the mind. Or, more specifically, intriguing to our subconscious mind.

The reason why this is a powerful technique is down to something neuroscientists call processing fluency. An image with high levels of processing fluency is easy for us to look at and understand. People prefer images with higher processing fluency, particularly images that are simpler than we expect them to be [3].

The new Instagram design still depicts a camera, but does so in a far simpler way than the old design. It's unexpectedly simple. This difference in expectation will obviously wear off as the memory of the old design fades and people become accustomed to the new version. Then another psychological effect should kick-in: the mere exposure effect. This effect, well-known to psychologists, is that the more times we are exposed to an image, the more we like it [4].

Of course, whilst designs that are simple on the surface can be effective, they carry the risk of being boring. Adding in layers of meaning to a design can lessen this risk. This is where propositional density helps.

Designs that evoke lots of meanings with few visual elements are easy on the eye (high processing fluency) yet still interesting to our subconscious mind (avoiding the boredom risk). A couple of good examples of successful logos with high propositional density are the logos for the 2008 Obama presidential campaign, and the apple logo.

Both are visually simple yet loaded with potential meanings. The apple has connotations of knowledge and learning, of something natural and healthy, and good for children. The Obama logo reminds us of the American flag, has a sunrise (which itself evokes hope and fresh beginnings), the red stripes look like a ploughed field, as well as the logo itself forming the letter 'O'. Of course the numbers of meanings will

depend on the individual viewer, so logos that can evoke as many universal meanings as possible are probably best.

The new Instagram logo depicts a camera, but in the most minimal way, with just a square, a circle, and a dot. However, true to its earlier logo, it's not a contemporary camera, it's an old style 1970s/80s Polaroid type camera, carrying connotations of nostalgia, childhood, family photos, and so on. It's overlaid on a colour-array background. The colours are redolent of light, filters, and being warm colours (notice that they haven't used any cold colours) they convey energy and excitement. They also look like a sunset, a time that film-makers call the magic hour, when some of the best photography can be done. The sunset also carries connotations of the evening, nights out, fun etc. Of course, most of these associations will be triggered subconsciously, as most people won't stop to think too hard about the design consciously.

3. The power of curves

Lastly the logo is curvy. Research shows that, with some exceptions, people generally prefer curvaceous designs over ones that are more angular [5]. Curves can make a design feel approachable, friendly, even cute. Our brains have evolved to rapidly detect pointy or sharp things around us to that we can avoid hurting ourselves on them. Whilst we rationally know that a design can't hurt us, this subconscious scanning for angular corners goes on without us really being aware of it.

With more companies adopting neuro-research and thinking into creating their designs, I wouldn't be surprised if Instagram's new logo is the product of this type of testing and development. I believe this neuroscience-inspired approach will continue to grow into a rich field of insights for design. Just as tech tools like photoshop extend the artistic skills of designers, I believe neuro design will help augment their own intuition about what makes a design attractive and effective.

References

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