# Application of neuroscience in Print testing

### PRESENTATION DOCUMENT FOR MSRA CONFERENCE

JUNE 2013

# What we have for you today...

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**Cognitive neuroscience today** 

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What cognitive neuroscience really says about the brain

The implications for marketers



Getting the best out of neuroscience



# Cognitive neuroscience today

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# **Cognitive neuroscience is quite fascinating and more so to marketers!**

The glorious snapshots of the brain in action that it yields seems to offer a deeper insight into what people think about brands, and why they buy what they buy

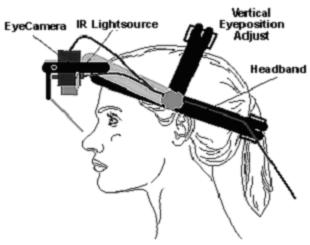


- Most marketing or advertising conferences now have a strong thread of neuroscience running through them
- We constantly hear papers arguing that scientists' increased understanding of the brain will change marketing and the way we measure it.
- The book many people are most likely to have read on the subject *Buy-ology, by Martin Lindstrom* makes similarly strong claims: that neuroscience will play a revolutionary role in research and marketing in future.



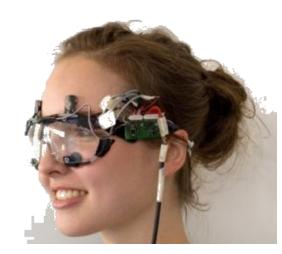
# The technologies today are quite many and powerful





The techniques of neuroscience are hugely powerful in helping us understand how the brain works, and are legitimately used by academics and industry bodies to try to answer the 'big' questions about how marketing works in general









# ...but It's the findings that count



However, neuroscience techniques are not the unbiased view that many assume, require careful interpretation by real experts, and are too expensive and time consuming for most day to day client research needs.

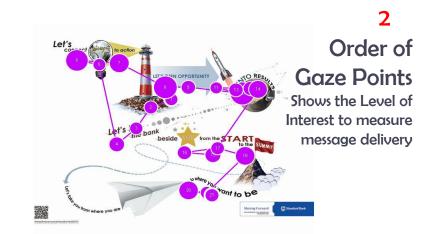
# Most importantly, **by focusing on the techniques, we miss the really**

**relevant stuff** that neuroscience can bring to marketing – the learning and models of how the brain works, how we deal with information in all its forms, and how we make decisions. It's in summarizing the key findings from neuroscience, and their implications for marketers, that we've focused our efforts.



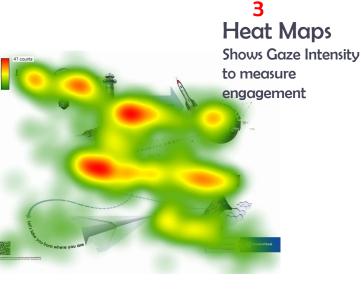
# **Sample Analysis Type**

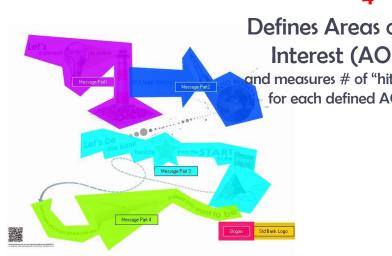




**Defines** Areas of Interest (AOI) and measures # of "hits" for each defined AOI

Δ







# **Evaluating Image Impact**

### Heat map analysis

#### Sunsilk Ad



#### **Sunsilk Ad Modification**





In this case, attention is focused on the headline and the model's face. Little time is spent looking at the brand.

A subtle change to where the model looks directs visual attention towards the brand, and is clearly shown in the eye-tracking results.

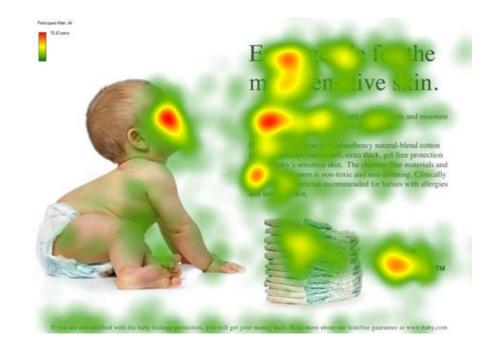


# **Evaluating Image Impact**



If you are not satisfied with the baby leakage protection, you will get your money back. Read more about our leakfree guarance at www.baby.com

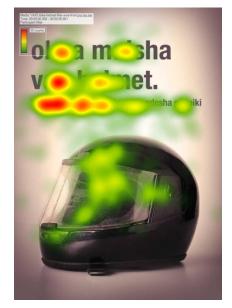
In this case, attention is focused on the baby's face. Little time is spent looking at the brand.



A subtle change to where the baby looks directs visual attention towards the brand, and is clearly shown in eye-tracking results.



## The less the text the better – regardless of the language sometimes

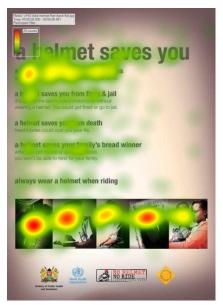




#### SWAHILI









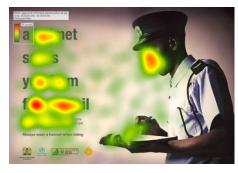
# Sometimes language has influence – for this test, Swahili executions had a better effect at relaying the intended messages

#### Swahili executions





#### **English executions**









#### Swahili executions



#### **English executions**





# What cognitive neuroscience really says about the brain

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## 1. The brain is organized into a hierarchy of modules - 3 'mega-modules' represent information relating roughly to:

#### **Physical Properties and Cues.**

An understanding of what the brand is and does.

(What It Is, Logos, Colors, Shapes)

#### Interactions

What the brand experience is like and/or is expected to be like. What I can see, smell, hear, touch, taste...or expect to experience?.

> (What It Does, How it is used, Information Related to What I Do with It)

#### **Emotional Valuation**

Feelings, resonance, desirability, attraction/Repulsion. How I value the brand, based on the creative idea. What it means to me on both rational and emotional levels.

(Value Related to Long-Term and Short-**Term Emotional and Social Goals)** 

...ideally any ad should establish these associations so well that the brand becomes

**Brand** Representation in the mental workspace

Knowledge

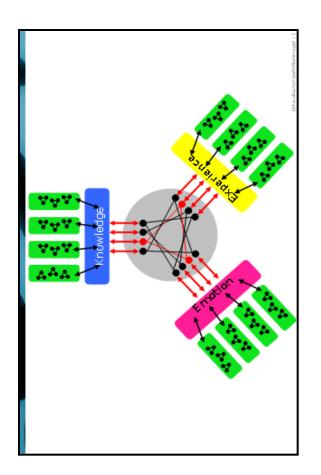
#### **Emotion**

Experience



SUPERFAMILIAR!

## 2. A key piece of brain 'circuitry' is the Mental Workspace



If information is to be used, it's no use it being kept separate - it must be integrated, and the 'mental workspace' does this.

The mental workspace has a highly limited capacity (3-4 items), i.e., we can only think about 3-4 things at once. The mental workspace is central to complex cognition, including:

- Consciousness
- Decision making
- Long term memory
- Linking: learning, building associations
- Control over voluntary actions

So for information to be used in decisions or changing perceptions, it has to gain access to the workspace.



## 3. The currency of thought is the 'representation'



Information about objects & concepts (e.g. brands) is organized in the workspace into 'representations'.

Each representation must have input from the 3 mega-modules of Knowledge, Experience & Emotion.

However, assembling representations takes time and effort, hence the workspace can handle only 3-4 representations at once, and they can only be assembled one at a time.

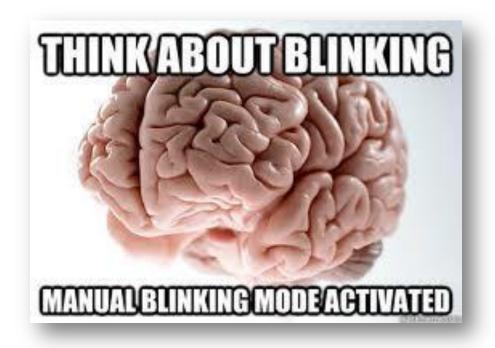
Crucially, representations for highly familiar or important items can be assembled more quickly, which means they are more likely to influence decisions, as they can command time in the workspace more easily. Such representations can be said to be 'superfamiliar'.



## 4. The brain 'blinks'

The **sequential process of assembling representations creates 'blinks' in attention** – blind spots where no new information can be processed because the workspace is 'busy' creating other representations.

This means that information presented too quickly will not all be processed as the brain simply cannot deal with it fast enough.





# The implications for marketers

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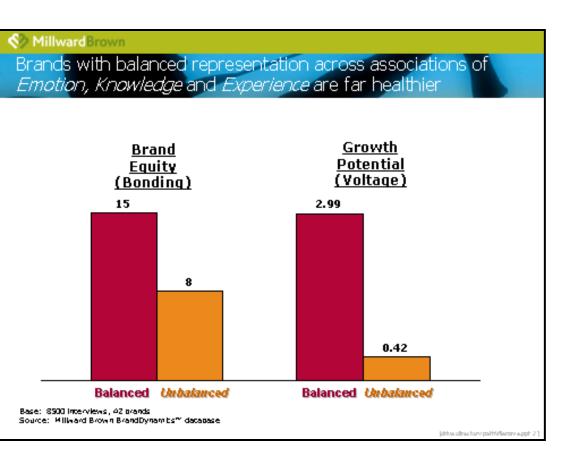




What Parts Are Your Custome **REALLY** Seeing?

# 1. Brands need to have strong associations in each of the 3 mega-modules, knowledge, experience & emotion

Brands are simply another sort of mental representation, so without clear associations in each of these areas, we cannot create strong brands.



This isn't simply conjecture – there is good evidence from survey research to support this. **Millward Brown looked at data** from its brand equity database, and classified brands based on the breadth of their mental associations, and how well balanced those associations were across the three 'mega-modules' of the brain.

It showed very clearly that the brands with good 'balance' across the three modules were stronger in terms of equity and in-market performance.



## ...these discussions are getting to the boardrooms

We now see neuroscience being cited in many brand or advertising decisions. We're getting used to hearing the phrase 'neuroscience proves...' as a justification for a new model of advertising response, brand strategy or advertising research tool (though it's often useful to examine just how much *actual proof follows such statements*).

Most crucially, the last few years has seen a blossoming of 'neuromarketing' agencies who claim to deploy the methods used by neuroscientists to answer marketing questions in a way which conventional research cannot. The following quotes all come from the websites of such businesses:

'Pure, instantaneous, unfiltered responses offer more accurate and more reliable insights than other consumer research methodologies'

'We know that market research has not been giving all the answers'

'Don't rely on focus groups and consumers' ability to express their opinions about your product. Let their minds speak for themselves'

'Traditional methods... are limited in their predictive power'



# 2. Engagement with consumers is crucial for marketing to have influence

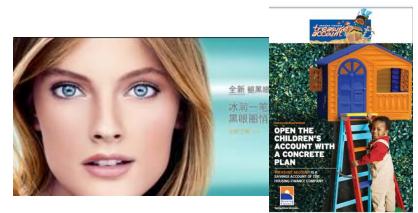
Only information which makes it into the mental workspace has the chance to be integrated with, and so affect, existing brand perceptions-and so only material that makes it into the workspace has a chance of influencing later brand decisions

Executions, more often than not, need to be tailored to reflect local market brand status and culture Strong engagement comes from ads with at least one of

- Personal relevance
- Emotional resonance
- Distinctiveness

Some ways to improve on engagement

> 1. Something beautiful – usually a celeb or model, a baby, a puppy, etc. etc

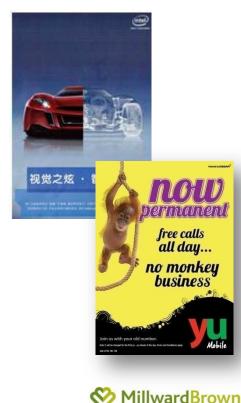


2. An active pose: Helps show movement in a static image.





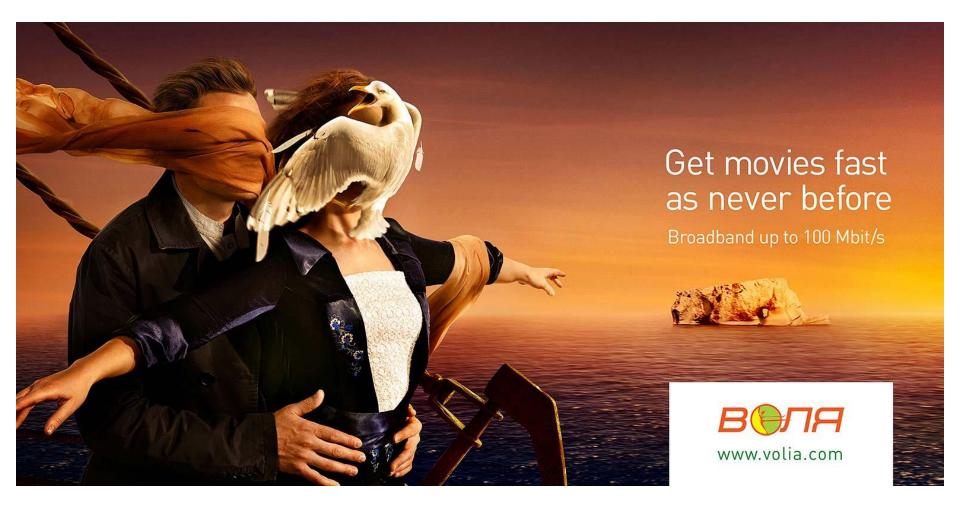
#### 3. A highly unique or interesting image (e.g. The Monkey, or this ad for Intel)



# Examples of some great ads









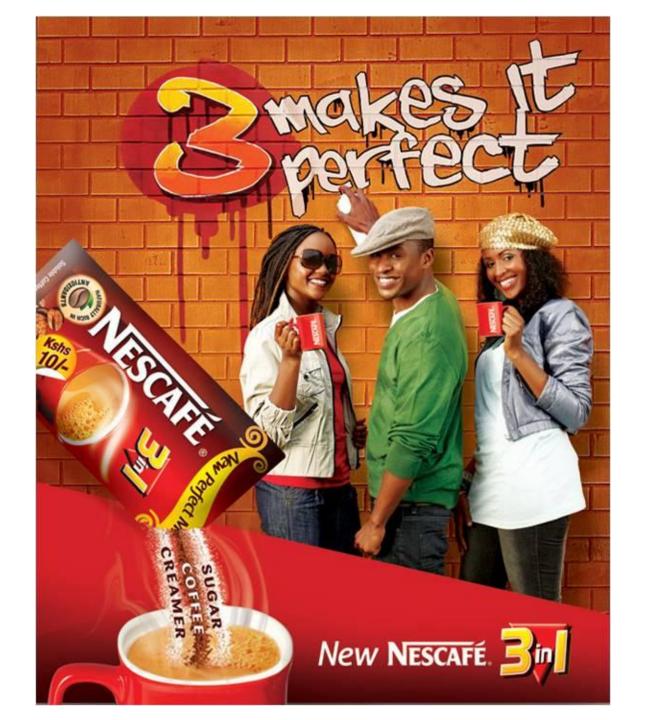




#### Look to the side without looking to the side Blind Spot Assist from Mercedes-Benz.



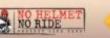
Mercedes-Benz The best or nothing.



a helmet saves you from death

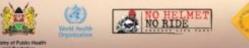
Head injuries could cost you your life. Always wear a helmet when riding





# a helmet saves you from head injuries

After a head injury, your life will never be the same. Always wear a helmet when riding





# **Other implications for marketing...**

3. Integrated branding is crucial

4. Marketing must be task– relevant when it is encountered for consumers to engage with it.

5. Getting in the way is worse than not being there at all Only the engaging elements of the marketing message will make it into the workspace, and so have a chance to affect perceptions

Relevance determines if brand messages are engaged with. Sadly for us, few brands are relevant or interesting enough to consumers to get into their workspace whenever they see or hear about them

It means that we need to consider the consumer's mindset at the point of consumption much more, and build campaigns that speak to this.

The negative effects of 'active ignoring' suggests that interfering with consumers tasks will lead to negative effects on the brand. It is particularly important as advertisers seek to engage with consumers more deeply through new communication channels, like the web, mobile phones, games and so on. FIND A WAY OF DOING THAT THAT DOES NOT DISTRACT

6. Marketing communication needs to give consumers time to think

We simply can't ram loads of messages or too many story elements into our marketing



# Getting the best out of neuroscience

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# The current state of play

Marketers ARE increasingly turning to neuromarketing – and they will continue to do so more and more in future. But this has been a gradual, and so far limited process, for several reasons:

- Marketers are rightly being cautious. This is <u>new and to some people</u> <u>controversial</u>. So they are working with partners who they trust to do their homework before adopting more widely.
- ✓ There are still significant practical hurdles. The <u>technologies</u> are not available everywhere, and the <u>logistics</u> of brainwave measurement or brain scanning are not trivial. Testing robust numbers of participants is often <u>expensive</u> – or worse, not done.
- ✓ The extreme claims of some of the early practitioners in the field have <u>inspired</u> <u>skepticism</u> in some people
- ✓ Many of our clients regard their work here as potentially generating significant competitive advantage, and so are understandably coy about sharing too much publicly.
- ✓ Most marketers quickly realize that neuroscience methods in isolation can be hard to interpret and don't stand alone.



## Our experience in researching and now using these methods with clients has suggested the following best practices

Be critical	The technology can be alluring but the same questions that would be asked of any conventional research technique should be asked of these methods. Ask for proof. Go along to fieldwork or take the 'tests' yourself – it can be illuminating about how realistic the results are.
Look for experience	This is a complex area, so familiarity with the approaches, and a scientific perspective is important to understand what is claim vs. reality, and when neuroscience adds most value. Likewise, experience in drawing together neuroscience and conventional research is key to maximizing the value
Integrate	These methods do not reveal the 'inner truth' – they are a useful additional perspective on consumers' responses to brands and marketing, which needs interpretation in the light of other information. It is only by combining approaches that greater insight is revealed.

Overall our experience suggests that the future for **neuro-marketing is as another piece of the toolkit for understanding consumers**. Like groups, surveys, semiotics, tracking consumer conversation, and all the other methods researchers deploy, they have a role to play. However, **real understanding comes from integrating information, rather than looking at one perspective alone**, and it is in this context that these approaches will prosper.

MillwardBrown

# THANK YOU

