



MAXIMIZING RETAIL POP-OUT WITH EYE TRACKING

MICHEL WEDEL

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MUCH OF RETAILING IS VISUAL



- Marketing stimuli such as *brands, packages, logos, POP-display and advertising, and feature ads*, carry **visual equity**.
 - Human information processing is largely visual and visual attention impacts memory, attitudes and behaviour.
- **Visual features** are key in category management and shopper marketing.
 - How do we measure and evaluate what people look at?
- Commercial **visual clutter** is high.
 - Do these marketing stimuli capture and retain attention sufficiently?
 - How can we improve visual marketing?

COOL GRAPHS: WHAT DO PEOPLE LOOK AT ON A SHELF?

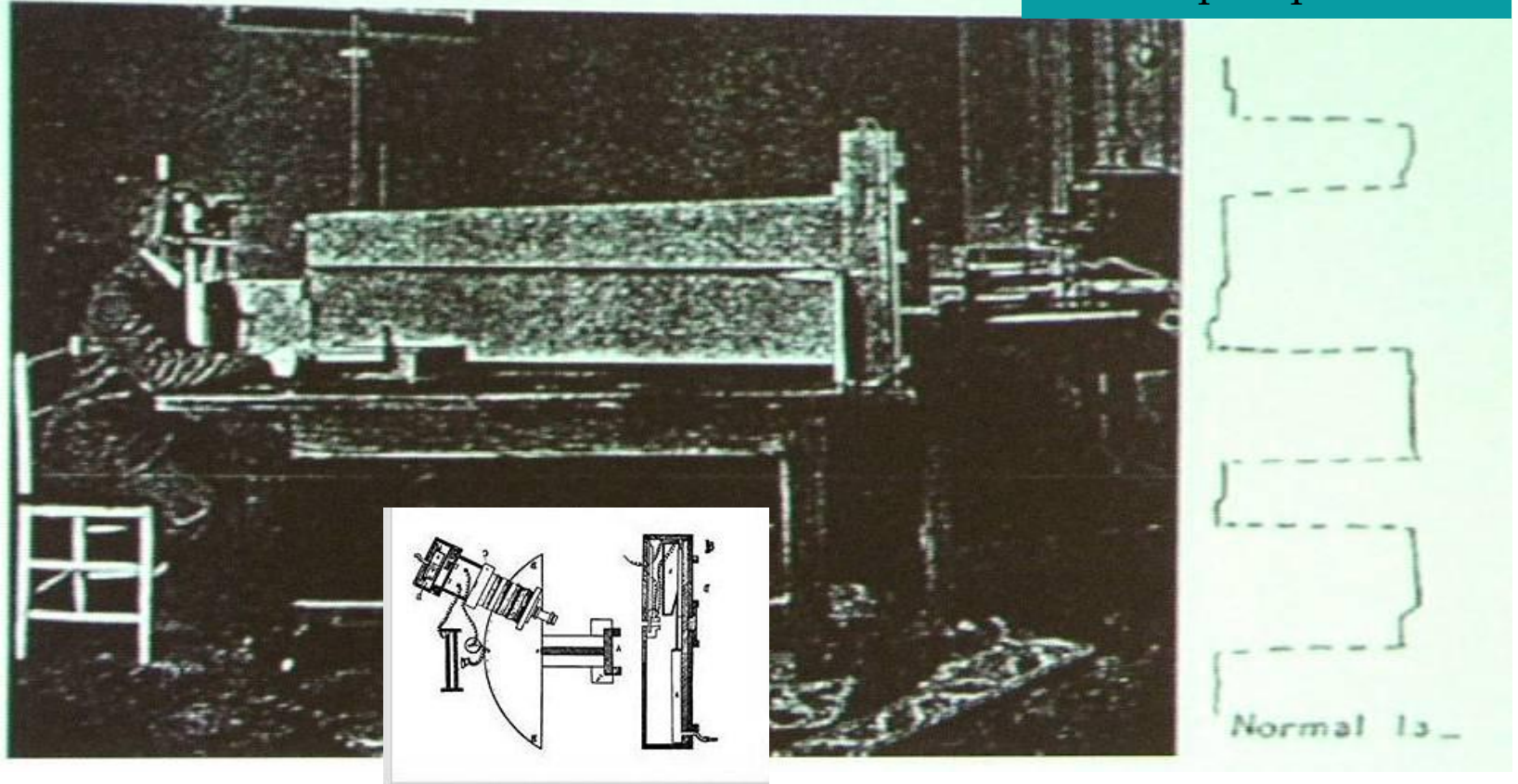


EYE MOVEMENT RESEARCH FOR MARKETING EFFECTIVENESS

- Almost 100 year History in Marketing (Nixon 1924)!
- Used by *manufacturers* such as P&G, Unilever, Kraft foods, and *retailers* such as Target and Walmart.
- *Providers* such as PRS (research) and Tobii (equipment).
- Results have great potential to
 - **challenge common knowledge,**
 - have **actionable implications** for retailing.
- However, much research still stops short of providing “cool” **heat maps** of gaze patterns.

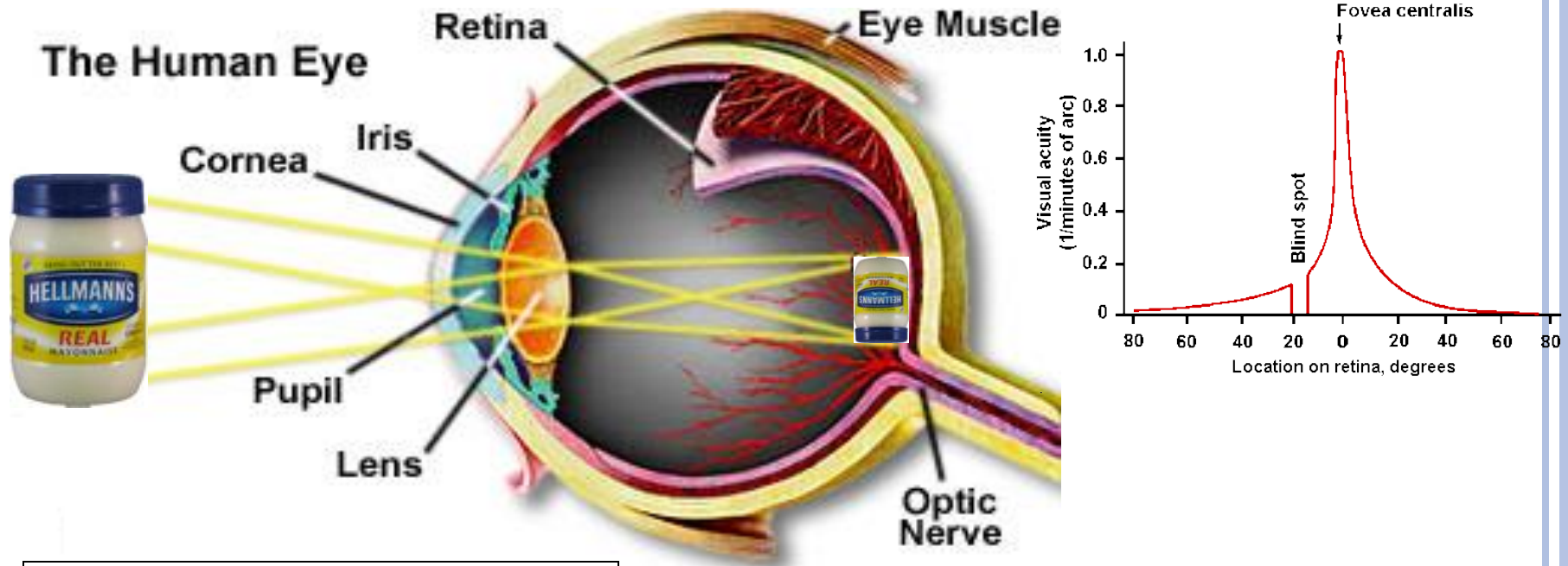
EYE TRACKING AROUND 1900: DODGE'S FALLING PLATE CAMERA

Involves a camera,
cardboard, knitting
needles, a pendulum,
and two bicycle
pumps



Manufactured by: Spindler & Hoyer, Göttingen: 375 DM

WHY DO WE MOVE OUR EYES?



Eye movements:

- Saccades (30msec)
- Fixations (300msec)

- Less than 1% of what is in our visual field we see clearly!
- We make about 150,000 eye movements a day
- About 1½ waking hours each day we see nothing at all!
- Over 30 regions in the human brain process visual information

SCAN-PATH DURING SEARCH ON A SHELF



Clutter and reduced attention spans cause many brands on the shelf to go unnoticed, or receive merely a single fixation!

RETAIL APPLICATIONS OF EYE TRACKING (1)

○ Store experience

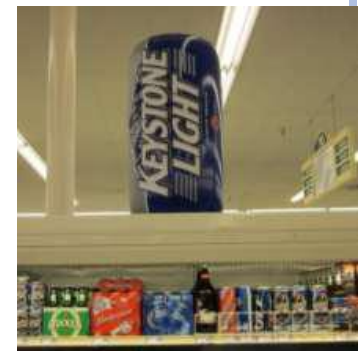
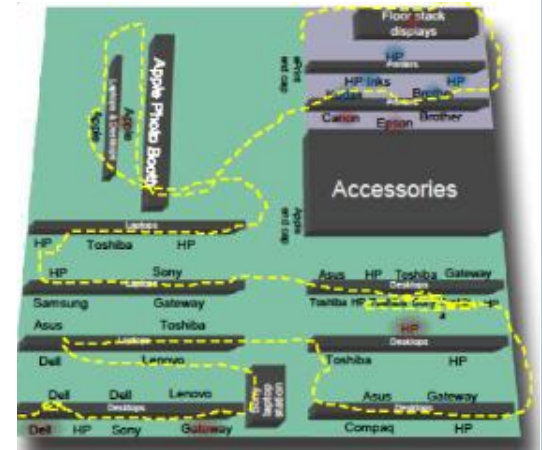
- How do shoppers navigate the store?
- What shelves and brands are missed?
- What is the relative effect of touch points?

○ Shelf visibility

- What is the effect of location on the shelf?
- How to achieve brand salience and pop-out?
- How effective are in- and out-of store factors?

○ POS exposure

- Which POS promotions are seen and missed?
- What is the effectiveness of overhead displays?
- Are end-cap displays seen and products picked up?



RETAIL APPLICATIONS OF EYE TRACKING (2)

Online shopping

- What is the effectiveness of packaging?
- Do ratings and recommendations work?
- Do users look at banner ads?

Packaging

- What colors, textures and logo's work?
- Are new products more visible?
- Do copycats confuse consumers?

FSI

- How to make a brand salient and pop-out?
- What is the best design of FSI?
- What is the effect of clutter?



Source: <http://www.prsresearch.com/>

MODERN EYE TRACKING EQUIPMENT



TOBII SYSTEM X1



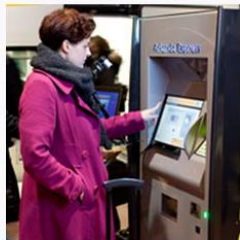
Flush mount on screens up to 25".



Track larger screens with deskstand accessory or tripod.



Track phones and tablets with Tobii Mobile Device Stand for X2 accessory



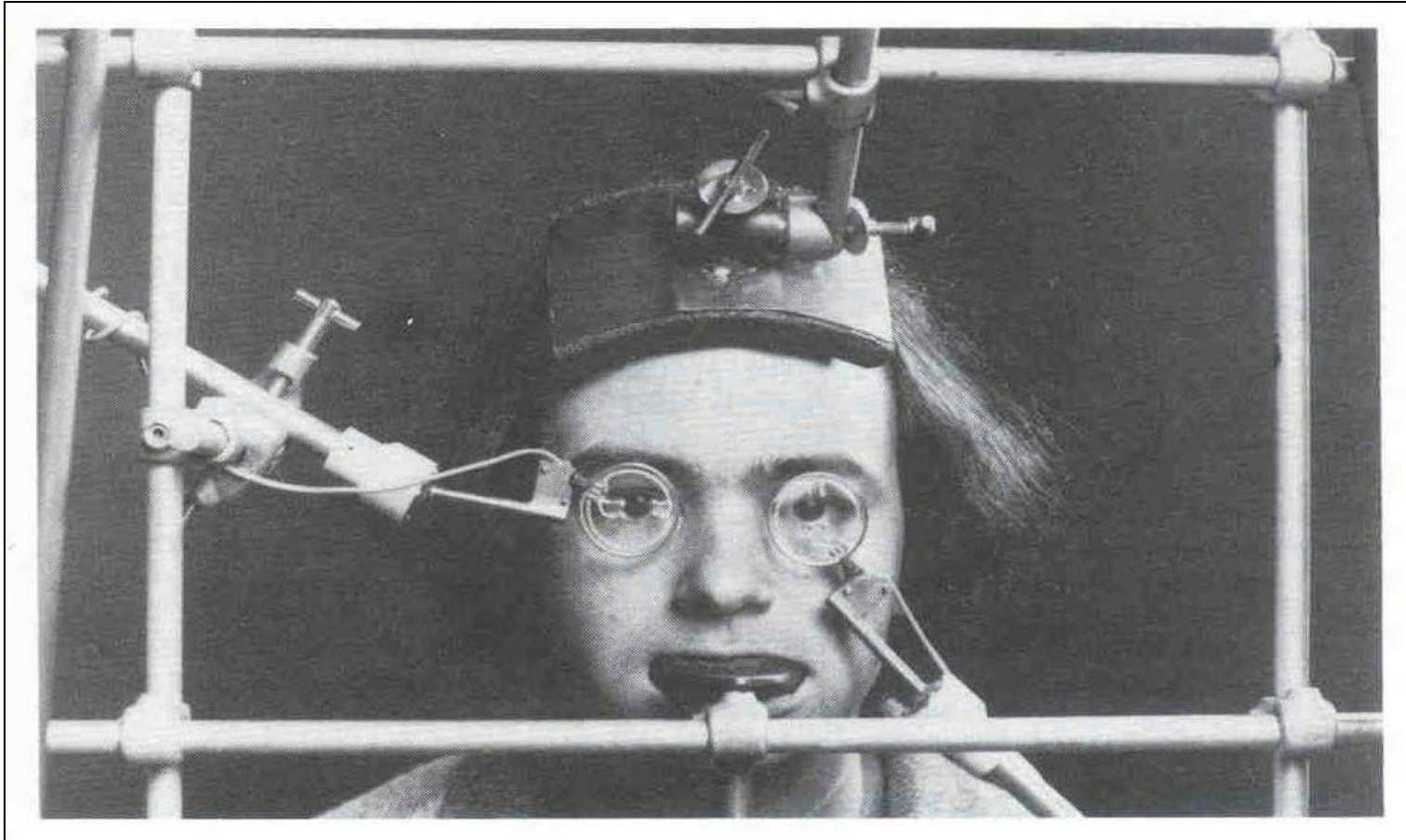
Possible to track any device or surface.



TOBII MOBILE SYSTEM



EYE TRACKING AROUND 1960



Mobile In Store Eye-Tracking





TODAY'S SELECTION OF TOPICS

- Characterizing **unplanned purchases**
 - What types of shoppers consider products they do not plan to purchase and which product categories are considered?
- **Planogram design**
 - What is the effect of facings and shelf position on attention and choice?
- Managing **brand salience** on the shelf
 - How can we differentiate the visual salience of brands and SKUs?
- Optimal design of **Free Standing Inserts**
 - How can we design feature ads to make them attract more consumer attention and improve sales?
- What are **short-term effects of online display advertising**
 - How do packshot, colors and contrast help findability?
- When are **copycats** visually too close?
 - Can we come up with metrics to identify closeness of copycats?

CHARACTERIZING UNPLANNED CONSIDERATION AND PURCHASE

- Categories that are more often receive unplanned consideration are more often **hedonic and promoted**; complementarities between categories exist.
- When **considering products unplanned** shoppers
 - make more product touches,
 - stand farther from the shelf,
 - are less likely to look at coupons/in-store circulars.
- Unplanned considerations are **less likely to result in purchase** and occur later in the shopping trip.
- Shoppers who make **unplanned purchases look at fewer shelf displays** and **stand closer to the shelf**

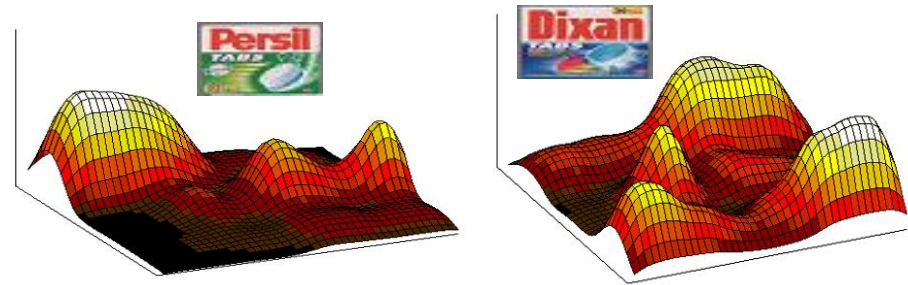


EFFECTS OF FACINGS IN PLANOGRAM DESIGN

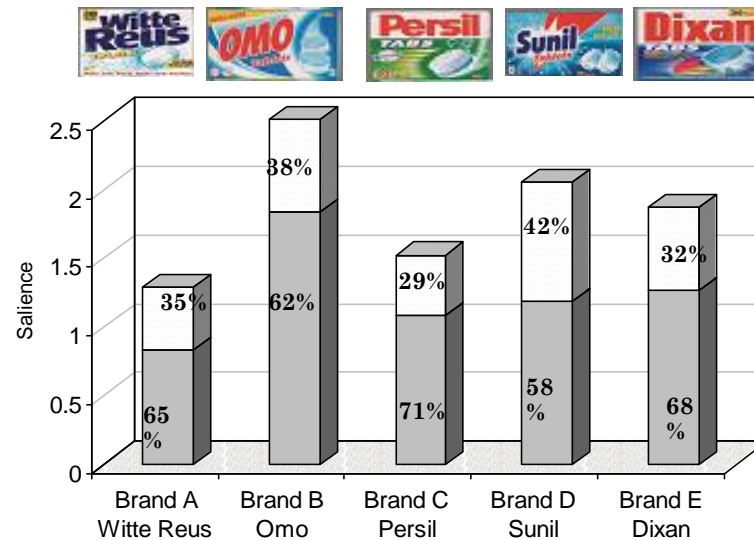
- **Number of facings** affects attention and brand evaluation:
 - doubling the number of facings increases noting the brand by 28%, reexamination by 35%, and choice and consideration by 10%.
- **Shelf location** has strong effects:
 - The top shelf position increased noting the brand by 17% and choice by 20%
 - The horizontal center position increases noting by 22% and choice by 17%
- Much of these effects on **consideration and choice** are caused by increased attention; prior usage of the brand also has strong attention effects



IMPROVING BRAND SALIENCE ON THE SHELF: IN-STORE AND OUT-OF-STORE EFFECTS



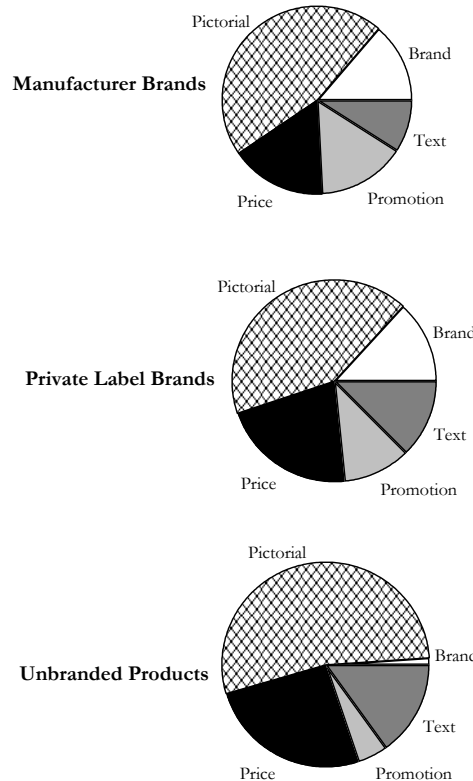
- Visual differentiation of brands and SKUs improves findability
- Similarity of private labels and national brands hurts findability
- About 2/3 of visual salience of packages on the shelf is caused by in-store factors, 1/3 is caused by out-of-store factors



HOW CAN WE DESIGN FEATURE ADS BETTER?



Actual



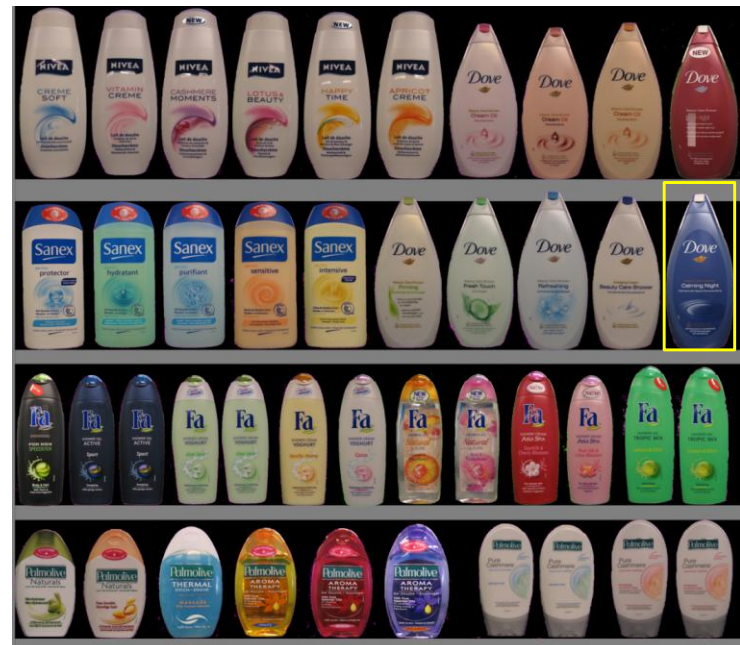
- Ad layout can be **optimized**: smaller pictorial, larger brand and price
- **Win-win** situation for manufacturers and retailers!
- **Attention affects sales**, and explains the effects of **feature ad size** (21%) and the **number of ads/page** on sales (-16%, for a 100% increase)

Sources: Pieters, Wedel, Zhang 2007; Zhang, Wedel, Pieters 2008

SEARCH BENEFITS OF ONLINE ADVERTISING



- Online display ads improve short term findability of brands
- Displaying a visual pack-shot in the online ad is key
- Colors and contrast need to be judiciously used



- Online ads can be targeted to specific audiences/moments
- But, click-through rates are low

TESTING VISUAL COPYCATS

Copycat confusion is pervasive and occurs on short exposures --grab & go shopping

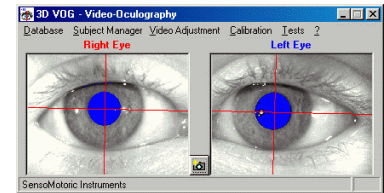


- The similarities in **global color** and even more **global texture** affect copycat confusion in the (triangle) task
- **CCM metric** provides a three-tiered copycat alert system:
 - *Copy-Alert, Copy-Warning, Copy-Safe*

CC-metric > 0.9

Category	Leading Brand	Experimental Copycat	Market Copycat
Honey			
Mayonnaise			
Ketchup			
Sports Drink			
Hand Sanitizer			
Canned Noodle			

EYE TRACKING: THE NEXT EPOCH



- *Eye-tracking is **effective for the evaluation** of visual retailing, and provides unique data on how consumers process information on packages, brands, websites, ads and shelves. What is next?*

- **Integration:**

- Facial Recognition of emotional expressions, pupil, blink-rates,...
- Computers, billboards, kiosks, smart-TVs, smart-phones, shelf-talkers, display, anywhere in-store?
- Companies such as Google, Sticky, Umoove



- **Applications:**

- Eye-control of information and manipulation
- Gaze-contingent provision of information

- **Challenges:**

- Costs/benefits of implementation
- Crunching really-really big data
- Dealing with the ethics

