



# False Alarm Theory: How Humorous Ads Work.

By Max Sutherland

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**"Humor can be dissected, as a frog can, but the thing dies in the process."**

(E.B. White 1941)

Some ads tickle us and make us laugh. Research shows these ads grab attention, and IF they are well executed<sup>1</sup>, then the liking for the ad washes over onto the advertised brand.

Despite E.B. White's wry prediction (above), humor in advertising has survived extensive dissection, exposing insights into its anatomy, function and origins. Yet it is true that the creation of humorous ads remains a creative process that owes more to intuition than to science.

It may seem blindingly obvious why funny ads grab attention, why we laugh at them and why we like them. But humor is full of surprises and the bits and pieces of research that I outline here converge on a surprising theory that is not entirely intuitive. It is an explanation of humor that has its roots deep in our evolutionary origins. It helps us understand not just ads that make us laugh but also a wider class of ads that involve closure.

## Anatomy

Most humor trades on uncertainty and the large majority of ads that are humorous tickle our funny bones through the use of incongruity<sup>2,3</sup> or in other words, deviation<sup>4</sup> from expectation.



Incongruity humor (anon.)

Incongruous humor leads us up the garden path of one interpretation only to undermine it and force us into a reinterpretation as illustrated here in this graphic that might have been an ad for Rabbit Semiconductor (but isn't).



DHL Ad

To illustrate with a TV ad, consider an old TV commercial - one of my all-time favorites. A pet bird is pecking the keys of a home telephone and shortly thereafter a DHL courier comes to collect the sleeping house cat that is unaware of a delivery note stuck to its body. Random pecking by a dumb bird at a telephone turns out to be cunning manipulation that successfully disposes of the cat.

A bird pecking is naturally interpreted as mistaking the phone keys for food and so we are led up the garden path. But only for a moment until we see the courier arrive. To come to the realization that the bird was trying to get rid of the cat, we are forced to backtrack and reinterpret the pecking scene – "Aha! the bird was dialing, not just pecking." Somewhere in this process, an uncertainty-switch flicks on ('huh?') to direct attention at resolving the incongruity between the two incompatible concepts (cunning, human-like intelligence and a dumb bird).

This uncertainty switch turns out to be the same one that I dubbed 'the intruder alarm' in a column two years ago. ("[Capturing Attention by Triggering the Mind's 'Intruder' Alert](#)"). When something seems not quite right in an ad, (e.g. a picture of a dog with technicolor spots), it triggers the mind's 'intruder alert' and captures attention. When humor tricks us into wrong interpretations, this same mechanism is activated to focus attention.

Any stimulus that is related to threat or survival (i.e. 'adaptively relevant') triggers this intruder alert including novelty, surprise or any departure from expectation and it can be monitored through the amplitude of brain waves (see [Generating Brain Waves that Pierce Attention](#)).

But what does humor have to do with threatening stimuli? The answer is found in the evolutionary importance of resolving ambiguity, incongruity and anomaly.

In the normal course of events, what we see and hear is interpreted with the mind on autopilot, in a template matching process that is conducted largely by the right brain.<sup>5</sup> If the mind is on auto-pilot, it makes sense that the mind's eye might also have some sort of protection device - an 'intruder' alarm - to alert us if the ID of something is not quite right or our interpretation of something is uncertain.

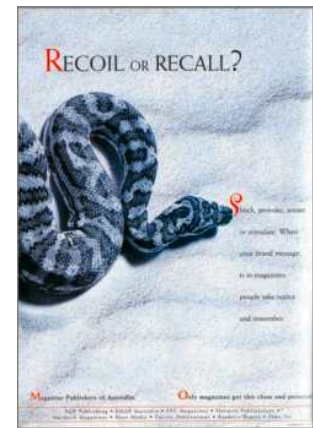
Humor triggers this attention via the same mechanism as threatening stimuli. The key difference is in how the threat is resolved. If the jolt is resolved as playful humor<sup>6</sup> - a false alarm - it switches off the intruder alert instead of prompting 'flight or fright'. By the time the brain aborts it, however, that jolt of attention has already been felt. With the DHL ad, any threat quickly dissipates in the realization that it is playful humor (a false alarm) and the whole thing is experienced as 'bizarre' but enjoyable.

Now we begin to see why humor might have positive effects and generate positive feelings. Just as running causes physical stress but feels good when you stop, so too humor feels good when it switches off the alarm. Pleasant feelings of relief come from realizing an alarm is false. Say 'boo' loudly but playfully enough to a child and the child flinches and laughs. Present an ambiguous, incongruous or nonsensical story to a grown-up and any mild threat instantly dissipates as soon as they realize that it is humor. As Alden et al have demonstrated when cues of 'playfulness' are around, incongruous ads are resolved as humor.<sup>7</sup>

This then is the 'feel good' theory of resolving uncertainty as a 'false alarm'. At first this theory sounds a little fanciful but the evidence mounts up, as we will see by next looking at the origins of laughter and why laughter is infectious.

## Laughter

According to Ramachandran, the main purpose of laughter evolved out of alerting others in the social group to danger by a warning cry.<sup>8</sup> If you have a warning cry, you also need another signal to 'cancel that cry' when the animal realizes there is no real threat to the social group after all. Laughter evolved out of that second signal - the false alarm signal. In the wild, echoing the laughter of others is functional because it amplifies the signal and disperses it to the whole social group, spread out over a considerable area. We begin to see why it has this 'infectious' quality.



So today when uncertainty triggers the intruder alarm but the incongruity is quickly seen as playfulness and not threat, the 'false alarm' cry goes up, urging others within earshot to join in the pleasant cry by echoing it with their own.

## Bits and Pieces

We might be skeptical of all this as conjecture were it not for the converging nature of all these bits and pieces that make the false alarm theory compelling. Support for it emerges from some strange places. Here's some more that comes from the curious reaction to pain that certain brain-damaged patients exhibit. Patients with a condition called 'pain asymbolia' feel pain but say that it doesn't hurt and they tend to giggle (yes giggle!) in response to it. The brain damage has disconnected the signal between two parts of the brain, the insular cortex that receives sensory input from the skin and the system associated with emotions that registers negative experiences (cingulated gyrus). Because of this disconnect, one part of the brain tells the person 'Here is something painful, a potential threat', while another part (the area concerned with emotions) says a fraction of a second later 'Oh don't worry; this is no threat at all' and prompts an involuntary vocalization of a false alarm signal (i.e. giggling).<sup>9</sup>

False alarm theory admittedly involves a lot of conjecture but it is compelling in the number of bits and pieces that begin to add up. It explains why humor turns attention on, and how it is related to the intruder alarm and the triggering of brain-wave alert-signals. It also explains why humor is tension relieving (a false alarm) and why laughter seems to be infectious.

## Conclusion

The pleasure center 'reward circuits' involved in humor have been found to be the very same ones that are also tickled by cocaine, money or a pretty face.<sup>10</sup> Like figuring out a crossword clue, the 'ahaa' part of resolving incongruity (i.e. comprehension) activates a mild degree of reward in these pleasure circuits. Then additionally, if closure has been elicited in response to an alarm, they are stimulated further by the 'ha ha' reaction as the alarm switches off with the realization that it is playful humor, a false alarm. The dual impact activation of these circuits results in the emotional uplifting effect we get from humor.

It all adds up to a better understanding of a feel good experience, not just from ads that make us laugh, but also a wider class of ads that trigger attention and that involve reward through closure.

*"Fear is an emotion indispensable for survival."* Hannah Arendt  
*"Humor is emotional chaos remembered in tranquility."* James Thurber.

## References

Acknowledgement: My thanks to Neil Francis for valuable assistance in unearthing some of the humor literature for this column

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1 Analysis of an extensive data base of commercials shows that "in many cases humorous advertising is tremendously entertaining and arresting, but the communication does not have relevant product purpose." See Paula Pierce. *Humor in Television Advertising – A Researcher's View*. in Jones, J. P. (Ed), (1999). *The Advertising Business*, Sage Publications. P186.

2 Beard, F. (2005). "The Humor in Advertising Research Literature: An Update." Private correspondence – paper currently in submission.

3 Alden D. L. and Hoyer W. D. (1993) An examination of cognitive factors related to humorousness in television Advertising. *Journal of Advertising*. 22, 29-37.

4 McQuarrie, E. F. and D. G. Mick (1996). "Figures of Rhetoric in Advertising Language." *Journal of Consumer Research* (March).

5 Zaidel, D. W. (2000). "Different organization of concepts and meaning systems in the two cerebral hemispheres." *The Psychology of Learning and Motivation* 40: 1-21.

6 Alden, D., A. Mukherjee, et al. (2000). "The Effects of Incongruity, Surprise and Positive Moderators on Perceived Humor in Television Advertising." *Journal of Advertising* 24(2):

7 Alden, D., A. Mukherjee, et al. (2000). "The Effects of Incongruity, Surprise and Positive Moderators on Perceived Humor in Television Advertising." *Journal of Advertising* 24(2):

8 Ramachandran, V. S. and S. Blakeslee (1998). *Phantoms in the Brain*. New York, Quill William Morrow.

9 Ramachandran, V. S. and S. Blakeslee (1998). *Phantoms in the Brain*. New York. Quill William Morrow,

10 Mobbs, D., Greicius, M.D., Abdel-Azim, E., Menon, V. & Reiss, A. L. Humor modulates the mesolimbic reward centers. *Neuron*, 40, 1041 - 1048, (2003).