

# The Short and Long Advertising Game

by Charles Young

Digital has changed a lot of things in advertising. The big one for ad researchers? Real time campaign feedback. But there is growing concern among marketers that this focus on short-term results comes at the expense of creative quality and brand building.

A generation ago advertising researchers, such as Prof. John Phillip Jones, author of *What's in a Name*, demonstrated that, at least for TV, if there is no short-term sales effect then there will be no long-term sales effects either. But the converse is not true—even if there is a short-term sales lift—that does *not* mean there will be long term sales contributions. Effective brand-building advertising should do both.

The key is advertising *quality*—in particular, how *sticky* the advertising is in consumer memory. After all, brands are not physical entities; they exist only in the minds of customers—brands are structured memories. Like the board game *Risk*, the goal of the marketer is to colonize more memory space in the mind of the consumer for their product category than their competitors do. Marketing is a game of memory.

## An Overview of Memory

As a simple model we can think of human memory as organized much like computer memory in that both include a scheme for the hierarchical encoding of experience.

## The Computer Model of Memory

There are similar levels of the memory hierarchy used in designing computer architecture.

At the top is the memory “register,” which is a very small amount of very fast memory which is necessary for the central processing unit (CPU) to manipulate data. This is the computer analog of the conscious mind.

At the next level is “cache” memory, or locations where frequently requested information is stored for high-speed access. This is the analog of working memory.

Below that is the level of “main” memory, or random-access memory (RAM). This is the memory system that has been organized according to categories or lists of meanings so that it is searchable in multiple ways.

The “hard drive” come next. This is where the gigabytes of pictures you’ve taken on your smartphone are stored.

The bottom levels of the computer architecture analogy represent slow-to-access memories that are stored in various forms “off-site”. These days that’s the cloud.

## Human Memory

First, at the top, is the level of *consciousness*. Here the memory space is small. The original 7-digit length of a telephone number, as Bell Labs found, was the limit that an average person can easily hold in conscious memory. Or the length of a 6-second Facebook ad.

At the second level is the level of *working memory*. Working memory deconstructs experience and transfers it into long-term memory. It's shorter than most people think lasting only about thirty seconds or the length of a typical brand story ad.

Third is the deeper level of memories that you can *recall* with some effort. These are memories that have been properly categorized and organized according to meaning in semantic memory. Words are used to *tag* the meaning of those memories so that they can easily be called forth, like the tags for YouTube videos.

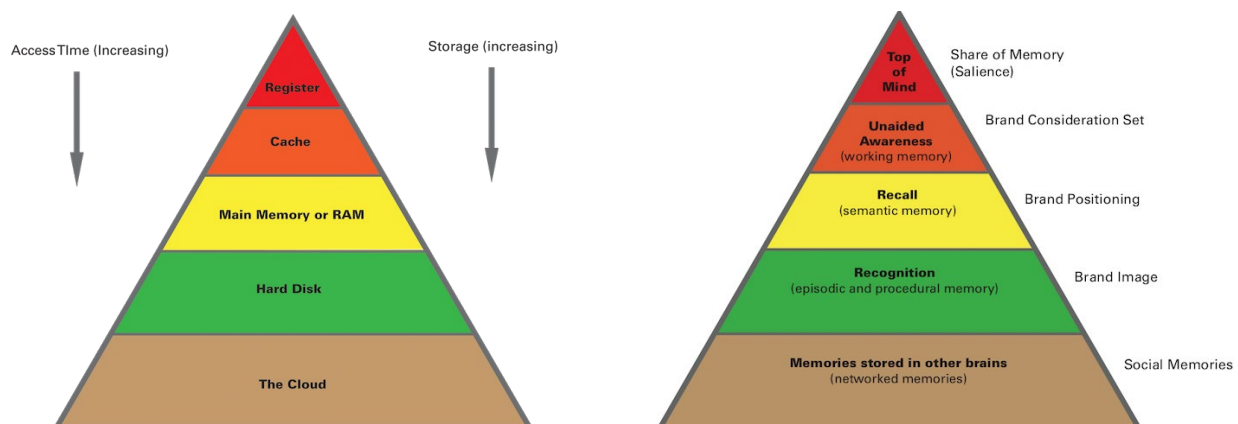
Fourth is the deeper level of memories of past experiences that you cannot recall spontaneously, but that you can recognize, if given a cue. This is the difference between recognizing the face of someone you've met before, but whose name you've forgotten. These are memories that can only be retrieved by showing people a piece of the original experience, like a picture, or the taste of Proust's petite madeleine.

Most of the non-verbal memories that accumulate in our action-memory system (procedural memory) and our social-memory system (episodic memory)—especially from our pre-adult years—have not been organized and tagged with verbal meanings. Memories that cannot be recalled on demand is what the “unconscious” mind is.

Fifth are memories stored “offsite”, in the heads of *other people*. These are not just memories of the “Honey, have you seen my keys?” variety. In fact, most of the memories that we need to live and do business in the world are to be found in the heads of the others we interact with such as butchers, bakers, doctors, lawyers, teachers, priests etc. Tradition, knowledge and culture operate at this level of memory.

## The Marketing Model of Memory

In business terms, a hierarchical approach can also be used to manage a brand in memory.



The most important measure of brand strength is *top-of-mind brand awareness*. By “top-of-mind” I mean the first brand that is mentioned *spontaneously* by the consumer when given a category cue. Unaided awareness is derived from all the other brands that are mentioned and form the consumer’s brand consideration set. Together, these are the brands that are on the shopper’s mental “short list”.

As a percentage, either top of mind or unaided awareness can be used to measure a brand’s *share-of-memory* in the category and is the single best predictor of *share-of-market*. The category leader usually has the strongest top-of-mind awareness, aka brand “salience.”

Below that are the brands they can recognize from a list—*aided brand awareness*. Aided brand awareness is a key measure for new products and niche brands.

Memories that have been tagged with word-meanings can be retrieved through *verbal recall*. These are memories stored in the semantic memory system and much of the content is *rational*—the product concept, features and benefits, reasons-to-believe, etc. All of these memories speak to the brand’s *positioning* vis-à-vis competitors.

But at an even deeper, *emotional* level lie memories of brand experiences that the brand user can *recognize* with a *visual cue*—but cannot recall verbally.

Collectively, these are the memories that make up the *Brand Image*.

Below that are brand “memories” stored off site—tribal memories stored in other brains, that can be accessed thru word-of-mouth and product reviews. This is the basis of *shared memories*, which is the key to building a *brand community*.

### **Top-of-Mind Awareness and Brand Strength**

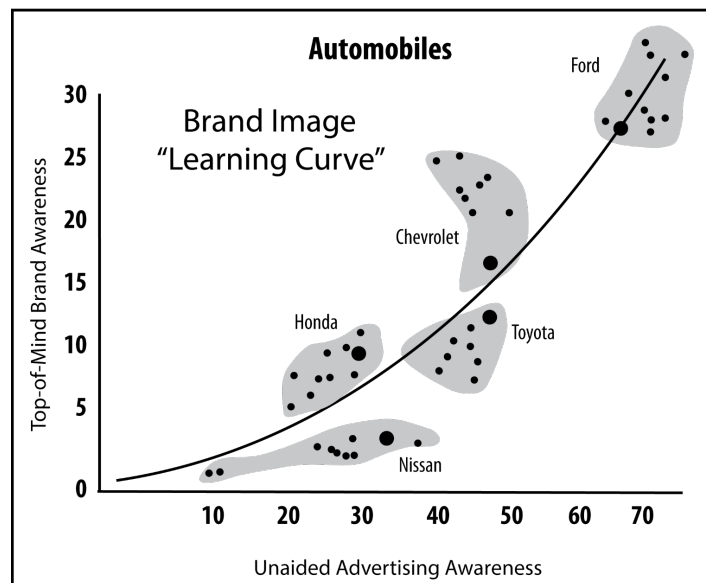
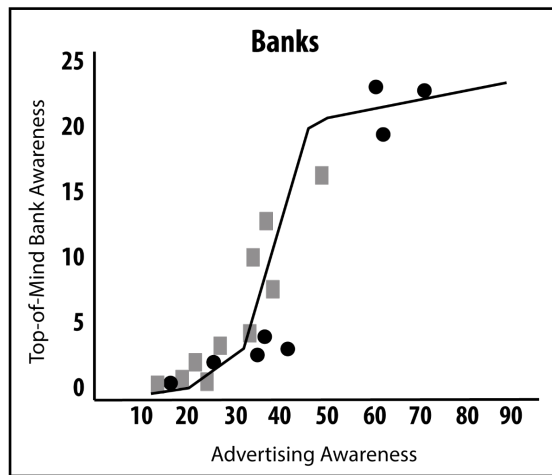
If I were to pick just *one* metric from consumer research as a measure of current brand strength it would be top-of-mind awareness.

Any salesperson will tell you that the key to making a sale is to first get on the customers’ *short list*, and then to move them to the *top of the list* through the rational and emotional arts of persuasion.

As a report card metric, it’s fast moving—reflecting the complex dynamics of the marketplace. It’s the leading indicator that moves up first when an established brand is doing well, and also moves down first when the brand is doing badly.

The fact is, top-of-mind awareness is strongly correlated with future purchase intent across most product categories.

The main drivers of top-of-mind brand awareness are behavioral—brand last purchased—and advertising. (It’s a circular relationship of course.)



Ad awareness is a function of two variables: first, how much *money* is spent with various media platforms to reach a target audience, and second, the creative *quality* of the advertising itself. Of the two, quality is more important.

Study after study, including a major one from Nielsen this last year, has once again shown that creative quality is the main driver of advertising ROI.

A few years back we built and published a sales model, using just our own data from testing over two thousand TV commercials in the fast food category to explain monthly growth in same store sales over a 77-month period for McDonalds. We found that creative quality explained about 45% of sales growth—a number similar to what Nielsen found.

The main variable in the model found that the momentum variable for advertising in the fast food category lasted about *3 months* after a typical ad went off air.

**The Memorability of Brand Stories** When determining creative quality, two of the most important questions an advertiser should ask are—first, will the ad get noticed and capture audience attention; second, will it be remembered? These two factors are strongly related.

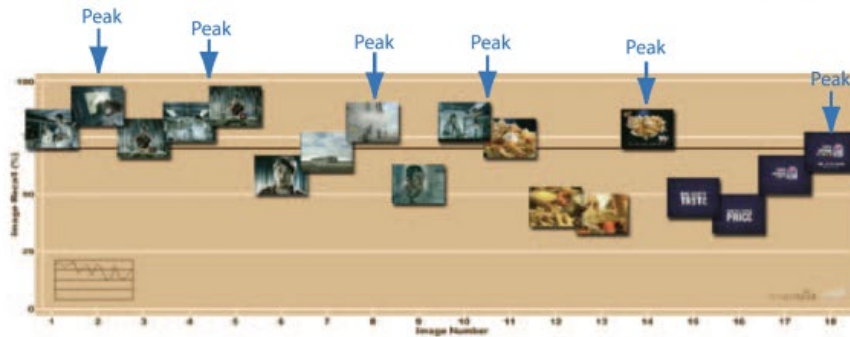
When we test an ad, we deconstruct it frame by frame and use a simple online Picture Sort® technique to identify both the moments in the ad that did the best job of capturing audience attention and which images are the stickiest in memory. This data is usually collected about ten minutes after ad exposure and can easily be collected on a smart phone.

The Memory Map (aka “Flow of Attention”) of an ad video looks like a musical score, with pictures plotted on the staff instead of notes. The height of the pictures on these graphs represent how memorable each image is.

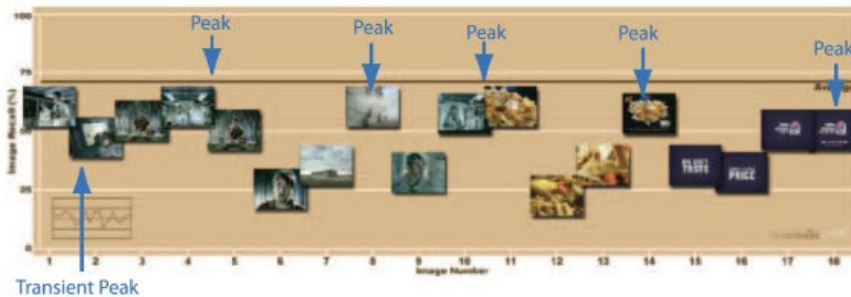
As you can see below, after just a very short time the working memory system has already sorted the images from a test ad into a hierarchy of “importance.”

## Structure of Visual Memory Over Time

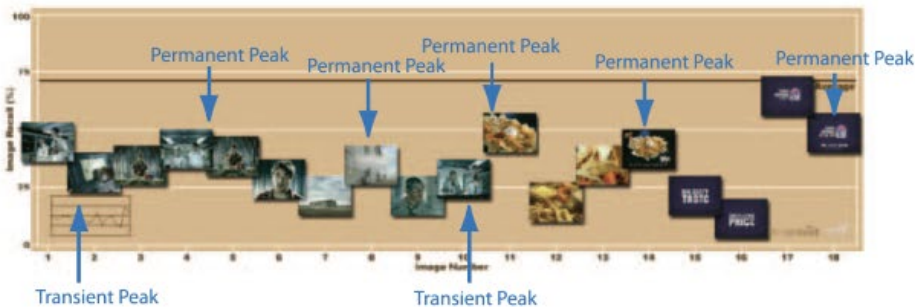
**20 Minutes Later: Average Pictures Remembered for Test Ad, 77%**



**24 Hours Later: Average Pictures Remembered for Test Ad, 62%**



**7 Days Later: Average Pictures Remembered for Test Ad, 52%**



*As the memories of images decay, the rhythmic structure of image recall remains fairly intact over time, though a few peaks fade. Short-term memories that are highly charged with emotion are more likely to be permanent.*

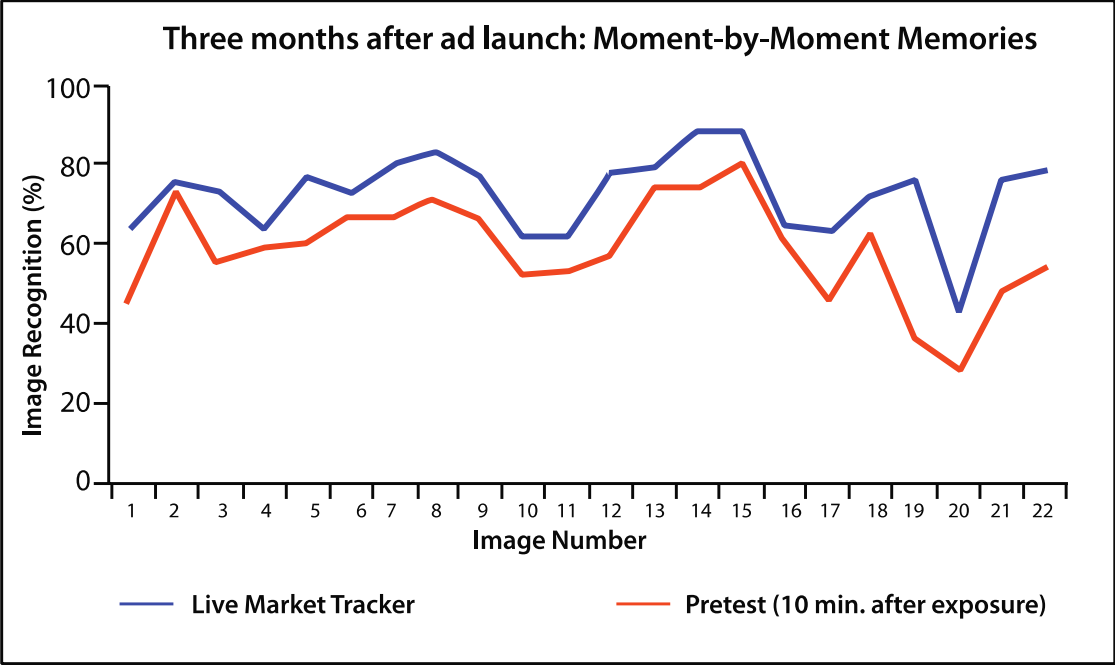
The graph shows the results of a simple experiment (replicated 5 times) where matched samples of consumers were shown the same ad to three matched consumer samples 20 minutes after ad exposure, 24 hours after ad exposure and 7 days after ad exposure:

As expected, the average recognition level for the set of images in the ad decays over time, from 77% to 62% to 52%. So, about half the images are still remembered a week after seeing the ad.

But the really interesting finding is the similarity of the contour and connectivity of the three memory maps. As the memories of the ad decay, the rhythmic structure of image-level recognition remains fairly intact over time, with peaks and valleys remaining across these different time frames.

As an even longer test of memory, we compared the memory map from a pretest, taken 10 minutes after ad exposure, and compared it to the data collected from an in-market tracking study, with an embedded picture sort question. This data was collected online from the target audience 3 months after the ad started running live on TV.

As you can see in the graph below, the narrative structure of the brand story itself remains intact in memory for a surprisingly long time.



The key to driving top-of-mind awareness, and to attracting consumer attention, is to create peak, memorable experiences with advertising.

When predicting the attention or engagement scores for an ad, about half the variance in these scores can be explained by a handful of rating statements measuring things like relevant news, entertainment value, relatable situation, etc. The other half can be explained by looking at how the audience filters the visual information in an ad and counting the number of peak experiences created by the ad.

The peak images in an ad, rising to the top of consumer memory afterwards, are the *buoyant* images in an ad and are the ones most likely to push consumer thoughts up from the dark depths of memory into the light of consciousness.

Peaks can contain both new information and emotionally charged images from a brand. Peaks also contain *familiar* content that has been used in prior advertising, i.e. advertising equities, which are attachment points for attaching new memories to old ones.

In fact, strong new content peaks, packed with emotion and relevant information, are prime candidates to become fresh equities for future advertising if used again in new campaigns.

### **Deep Brand Memories**

If top-of-mind awareness of the brand is the part of the proverbial iceberg that sticks above the water, then the bottom up view refers to the submerged structure of brand memories that floats underneath. These are memories that have been aggregated from all the past experiences the consumer has had with the brand, including memories from prior advertising.

These submerged memories are the *backstory* for the brand for new advertising and provide clues to consumer *motivations* to buy the brand.

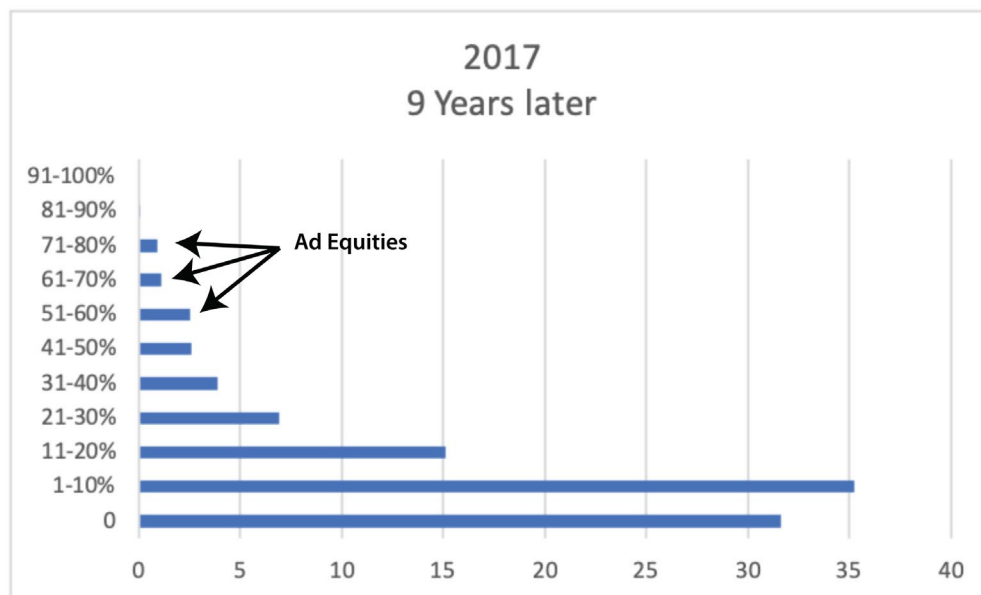
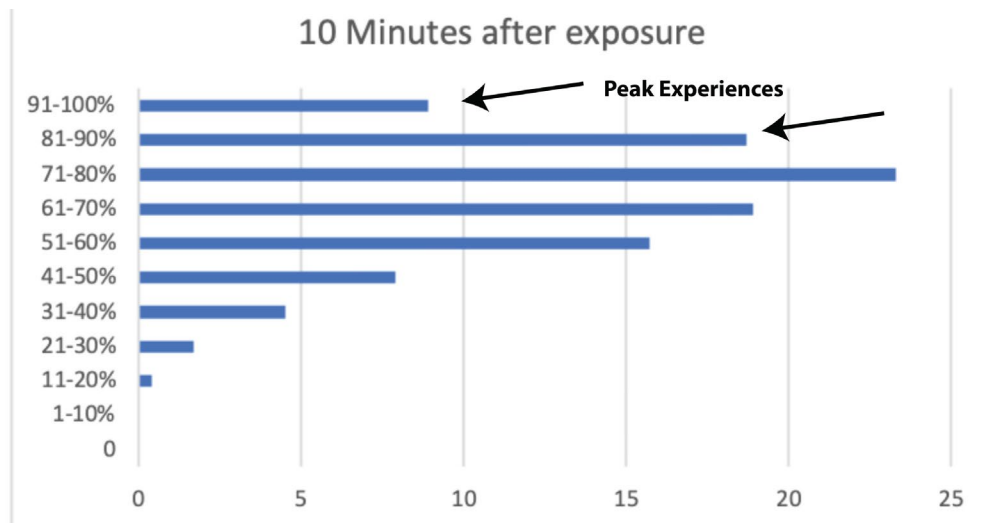
So, to push our understanding of branded memory to the limit, as an edge case, a couple of years ago we did a very long-term memory study in the fast food category. In 2009, we had tested 268 TV commercials in the category, across 17 brands. Our question was, how many of the brand memories that were created in that year can still be found in consumer memory nine years later?

We began by looking at 4050 unbranded images that used to measure the memorability of each image *ten minutes* after each respondent first saw the ad.

Then we re-tested these *same* images nine years later, among an additional 5000 demographically matched category users, to find out which images were still remembered so many years after the advertising ran.

The graph below shows the distribution of how well these images are remembered by consumers at these two points in time.





The data from this study confirms that the memory effects of advertising can be quite long lasting. Nine years after exposure, the average recognition level was 12.5%, with only 31% of images getting zero remembering.

**The images that were best remembered were driven by ad quality.**

Ads that were found to be highly motivating at the time they were tested were significantly more likely to be remembered than images from ads with weak motivation scores, with 16.3 percent of the imagery from the top quartile of motivating ads being remembered, compared to only 8.4% of imagery from the bottom quartile.

Moreover, this research confirms the importance of *emotion* in brand building. Imagery that was found to be highly charged with emotion at the time of testing (self-reported emotions from our Flow of Emotion® sort) were also better remembered. For the strongest quartile of emotional imagery 17.2% of the images were remembered, compared to 7.6% from the weakest quartile.

The key point here is that not only are long-term ad memories plentiful, they are predictable. The peak memories of an ad, identified only 10 minutes after first exposure, is highly correlated with the memories that can still be found in consumer's heads many years later.

The top several layers in the bottom half of the graph are the gold—the memorable imagery from past advertising have been transmuted into *brand equities* that can be leveraged in future advertising executions to build a stronger bridge between the past and the brand's future.

Finally, brand memories are not distributed evenly across different segments of the media audience. In this age of micro-targeting, it's important to understand the differences in the brand's equity across different segments in order. You can actually look at the pictures to see the memory equivalent of a brand Instagram feed for each consumer segment.

In sum, top-of-mind awareness is the top-down view from the executive suite—it gives you a simple weekly or monthly report card measure of winning and losing in the battle for the consumer's mind.

And at the bottom of memory is the view from the solid ground on which brands can build future growth.

All of which tells us that those of us who play the long game of advertising are, at the end of the day, Memory Makers.