Harness your
creative power with
advertising research

Ameritest

WHITE PAPER

The Essence of An Ad

BY CHARLES YOUNG

Ameritest 4841 Tramway Ridge Drive NE, Albuquerque, NM 87111, 505-856-0763, www.ameritest.net

The Essence of An Ad

By Charles Young

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.

T.S. Eliot, Four Quartets

The continued use of neuroscience and biometric techniques in advertising research is likely to exacerbate the current schism between advertising creatives and advertising researchers by highlighting the differences between two opposing views of human perception. The Gestalt viewpoint, held by most creatives, is that an ad must be understood as a unified whole that is more than the sum of its parts. The other, analytic viewpoint is implicit in the moment-by-moment approaches used by researchers to look inside an ad for insights that might pay out for advertisers with more highly optimized advertising.

According to the Gestalt viewpoint, it is the *relationships* between the elements of an ad that matter most, not the strength or weakness of individual elements. An ad must be thought of as an interconnected system of images and words that interacts with human perception to evoke a specific, unique emotional response. Professor Anne Marie Barry reflects this view in her book *Visual Intelligence*:

> *"Like the poet T.S. Eliot, every art director and copywriter in advertising is searching for the perfect objective correlative—the string of illustrations and words that will serve as a metaphor for the product experience."*

In the view of the creative Gestalt camp, looking at a graph of the peaks and valleys of the target audience's brain waves is just another instance of researchers seeing trees instead of a forest—they worry that the essential meaning of the advertising experience, seeing each part in the context of the whole, will get lost in the linear real time data.

After all, it is the *meaning* of emotions evoked by a particular string of images that is critical to the strategic brand-building process, particularly the meaning that lies below the surface communications of an ad. If a marketer wants to convince the consumer that a new product is "cool," for example, she can't simply say it. If you say

you're cool, you're not. As the screenwriter Robert McKee points out in his book *Story*,

> *"An old Hollywood expression goes: 'If the scene is about what the scene is about, you're in deep shit.' It means writing 'on the nose,' writing dialogue and activity in which a character's deepest thoughts and feelings are expressed by what the character says and does—writing the subtext directly into the text."*

But of course it's the attempt to get below the surface, to understand the non-verbal and unconscious responses to advertising, which makes the new methods of neuroscience so intriguing to advertisers.

And in the defense of these scientific methods, it is now well established that the brain itself is a quintessential analyst. For example, vision is not a simple recording of electrical signals coming from the retina in one direction, but rather an active exploratory system that involves data selection, reduction, compression, integration, and continual feedback and interaction with many parts of the brain. As a result, the act of seeing the Gestalt pattern of an image involves not only attention, but emotion and memory as well.

A Simple Model

Here's a simple model for thinking about what goes on in the mind of the consumer while watching a television commercial; it's based on what is probably a common experience for the reader—watching a PowerPoint presentation.

At the incredibly low cutting speed of PowerPoint—on the order of one minute per screen versus the 3 seconds per shot for the average commercial—it's possible to be quite introspective and think about what you are thinking about as you watch a presentation unfold. (Try it the next time you sit through one.) This gives us an opportunity to examine a "slow motion" version of what is going through our mind at high speed, usually below the level of consciousness, when we watch a television ad.

Imagine that you are sitting in a conference room (partway through a long research presentation) looking at a screen filled with data. As you try to decide which numbers on the slide to focus on, you ask yourself, "What's the most important thing here? What can I ignore?" And as you try to attend to the conversation going on in the room, you think back to an interesting point made 7 slides back. You ask yourself, "How does this point fit together with that other point?" Also, perhaps after some unexpected finding is revealed, you ask, "Where is this going?" And repeatedly, slide after slide, you ask yourself, "How do I feel about this? What does this mean? How is it relevant to what I want to do?"

Finally, also imagine that by the end of the presentation you're pretty excited by the findings and have decided that you need to show this research to your senior executive. But she's a busy executive and won't have time for a thirty-slide presentation. In reviewing the findings, you feel that the important information can be summarized in a few key slides. So you ask for a copy of the research deck and sort through it for three or four key slides to take upstairs.

This simple model of screen-based communication highlights several important aspects of the television viewing experience. First, the audience is never a passive receiver of information but is always actively engaged in the search for meaning. Second, the search process is not limited to determining meaning one screen at a time, but rather looks backwards and forwards to connect what is on any given screen with what comes before and after. Third, not all of the screens of information that pass in front of our eyes are equally important in determining the net takeaway.

For the purpose of this discussion, the model also raises an interesting question. Which presentation represents the Gestalt of the virtual research meeting: The full thirty-page research deck of all of the data the researcher felt it necessary to show, or the four-page summary deck for the boss?

A television commercial begins its existence as a storyboard comprised of a few key frames. This is a small subset of the imagery that might be found in the finished ad. But when these images are viewed in relation to each other, as in a cartoon, most creative directors feel that they can convey the essential meaning of the brand story being told—at least for the purpose of selling the commercial's first audience, the client. Looking at it from this perspective, I suggest that it is possible to define the *essence* of a TV commercial as the analogue of the four-page deck— a critical subset of the creative elements that effectively captures the meaning of the whole commercial.

Determining the essence of a commercial may be useful to advertisers in several ways. First, in response to increasingly expensive media, creatives are challenged with editing commercials down to shorter units of length, from thirty seconds to fifteen seconds, or even shorter units for on-line video. As a result, advertisers have to ask themselves at what point the original, fully expressed idea ceases to be the same idea. Second, in response to average or poor commercial test scores—the need for optimization—it is critical to distinguish between the essential and the non-essential, so as not "to throw the baby out with the bathwater" when re-editing advertising executions. Third, in measuring the return on advertising investment, it is useful for advertisers to better understand what parts of an ad stick in the memories of consumers as part of its contribution to long-term brand equity.

Our PowerPoint model also reminds us of one more important thing: In the end, it is the *audience*, not the presenter that determines what the essence of an ad really is.

To ground our discussion of the essence of advertising, let us now look at one particular ad that many in the creative community consider to be an exemplar of advertising creativity. Let's see what two analytic research approaches—one based on brain wave measurement and the other based on an established online testing method—have to say about the essential nature of this ad.

A Powerful Ad

The commercial for Volkswagen Passat, "The Force," was created by the Deutch advertising agency and first aired on the 2011 Superbowl. In the media coverage that followed, it was ranked by most commentators as the number one commercial shown during the game.

The sixty second ad opens with Star Wars music on a small child dressed as Darth Vader marching resolutely through the house. In a progression of scenes, Little Darth is shown raising his hands forward to engage the power of the Force—with an exercise machine, a dog, a washing machine, a doll—all with no effect. Cut to a scene of Little Darth sitting in the kitchen, helmet in hand, after his mother tries unsuccessfully to console him with a sandwich. Suddenly his father returns home in a new car. Little Darth rushes excitedly outside past his father, determined to try using the Force one more time on the new machine. Little Darth is face to face with the front of the Volkswagen as the engine starts and he jumps back, surprised and triumphant at having finally found the Force. Cut to the kitchen, where the father is looking out the window and has pressed the start button on the radio key. Cut to supers announcing the all-new Passat, starting at $20,000. Close on Volkswagen Logo.
(http://www.youtube.com/watch?v=R55e-uHQna0)

Two Research Systems

As part of his annual ranking of Superbowl advertising using brain wave metrics, Dr. Stephen Sands, of Sands Research, reported that this commercial was not only the highest performing ad of this year's Superbowl, but one of the strongest commercials he's ever tested in terms of its ability to arouse viewers' brains. He later presented detailed findings of this research in an ARF webcast, which is the source of the brain wave data discussed below (with his permission).

Sands uses one of the most advanced tools available for measuring the electrical activity of the brain (EEG) while consumers watch commercials. It has also been adopted for use by the National Institute of Health in medical research. His equipment samples electrical activity from 68 points of contact on the skull. As a result, his system is state-of-the-art in determining not only total brain arousal, but also in locating approximately where (in the outer portions) of the brain the activity is generated. (See www.sandsresearch.com)

In analyzing his data, Sands has developed mathematical signal processing methods than enable him to report several different kinds of measurements. The first is the Neuro Engagement Score, which is basically a single number summarizing the

overall level of activity in the cortex for a given ad, indexed to a database of all of the ads he has tested—a report card score. Accompanying this is a moment-by-moment graph of the actual EEG engagement curve. Finally, by looking at the emotional region of the frontal lobe, Sands derives a second score, called the Emotional Valence Score, which is based on the positive and negative emotional response to the ad. This score is accompanied by a moment-by-moment graph of the peaks and valleys of the emotion waveform.

After seeing his webcast on "The Force," I decided to test the ad myself to see what additional insights we might obtain by putting our two different kinds of measurement systems together.

The Ameritest system is an online copytesting system that has been used and validated by Fortune 100 companies for many years. This is a "self-report" system in that all of the information comes from a careful questioning of respondent's conscious reactions to an ad.

The measures from our system can be placed into two broad categories. The first is measures of overall reactions to the ad, as expressed in words. This includes classic measures of Attention, Branding, Communication (open end), Motivation, Brand Ratings and Diagnostic Executional Ratings. The second category of metrics is our moment-by-moment diagnostics, which are based on five different picture sorting and copy sorting exercises. These techniques, some of which are patented, are described in detail on our website. The three sorts that are relevant here are the picture sorts: the Flow of Attention®, Flow of Emotion® and Flow of Meaning. (www.ameritest.net)

Performance of the Whole Ad

Consistent with Sand's Engagement ranking and the consensus of the creative community, we found that this ad is very strong in its ability to attract Attention, falling in the 99th percentile of all the thousands of ads we've tested in the past five years. The ad is also significantly above norm in Motivation. It is, however, directionally below average in its top-of-mind brand linkage to Volkswagen.

Based on ratings, the drivers of its attention score are its entertainment value, its uniqueness, and the likeability of the music—all of which are well above norm.

The drivers of its motivation score are its important and believable message, and the relatability of the characters and situation.

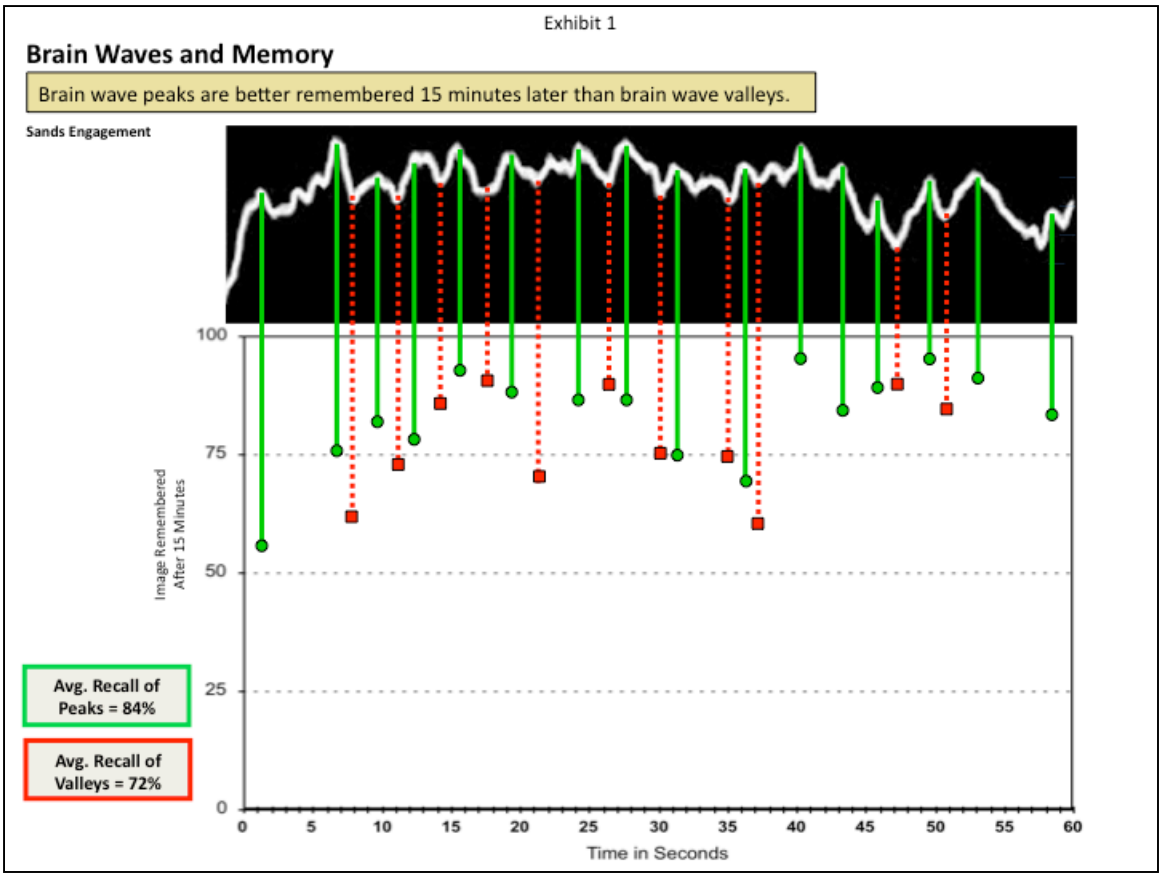
Its soft branding score is due, in part, to the fact that it stretches brand perceptions, giving four in ten consumers a "new idea or feeling" for the brand. In our experience, when ads stretch brand perceptions into new territories of the mind, the ad generally has to work harder to achieve good top-of-mind branding.

Finally, in terms of brand perceptions, the message communicated by this ad is that the new Passat is a "fun" car to drive.

Brain Waves and Memory

One of the things that is predictive of a strong commercial is the number of peak moments in the audience's attention curve for an ad—and Sand's brain wave attention curve for "The Force" has many peaks, as you can see in Exhibit 1.

Exhibit 1



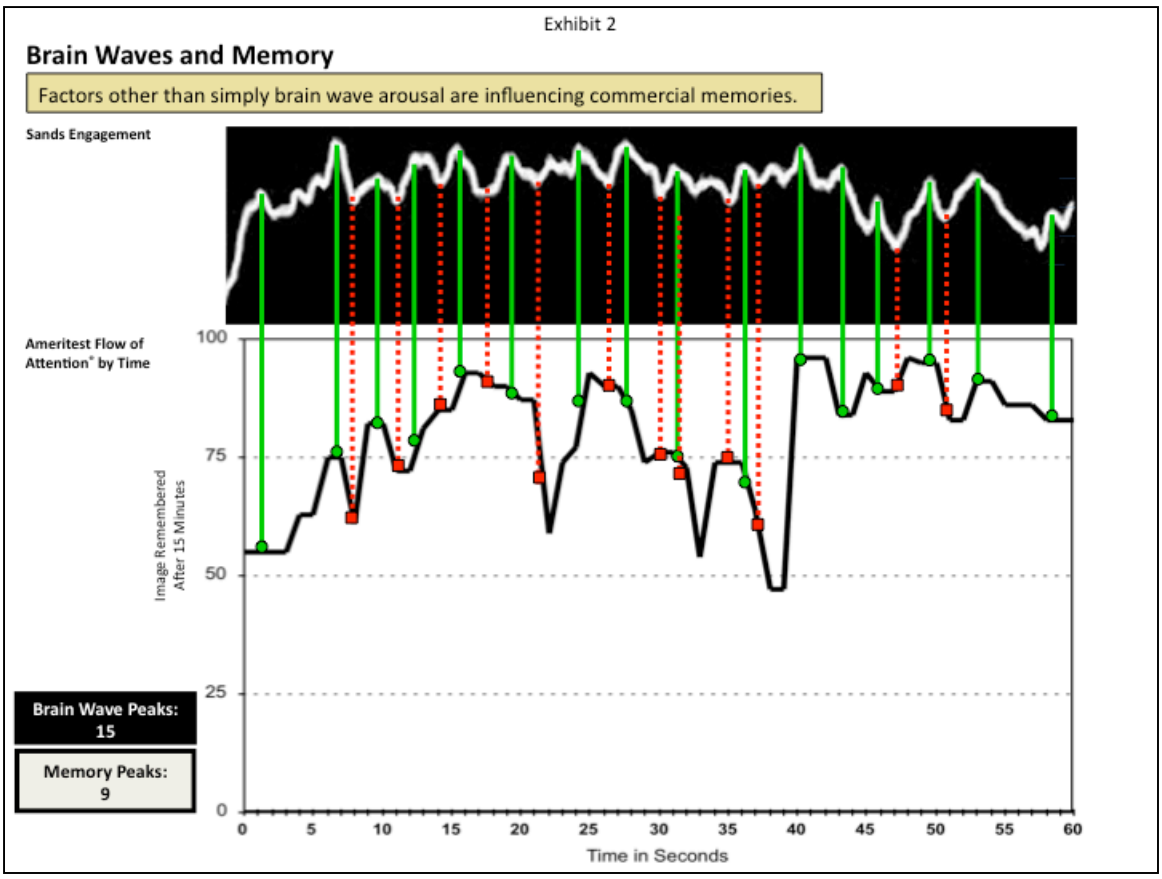
Peaks follow the rhythms of commercial storytelling. They are also linked to memory. The visuals that generate brain wave peaks are remembered by 84 percent of the audience fifteen minutes after seeing the ad, while the visuals falling in the valleys are only remembered by 72 percent of the audience—a statistically significant difference.

We know this from the first picture sort in our online test, the Flow of Attention. The name of this sort is a bit misleading because it is actually a short-term memory test conducted fifteen minutes after a respondent has seen an ad. In an attempt to identify the most attention getting visuals in an ad, we ask respondents to sort the images from an ad into two groups, based on those they remember and those they don't.

It has been called the Flow of *Attention* for two reasons: first, because we've found this particular diagnostic to be the one most predictive of the overall attention-getting power of the ad; second, when we use this sort in a qualitative setting, we frequently hear respondents say that they "never saw" the unremembered images in the ad they just watched, which reminds us that attention is usually a prerequisite for remembering.

Like the brain wave curve, the memory graph has many peaks—nine, which is more than the seven that is average for a 60-second commercial and thus is consistent with the strong Attention score overall.

You'll notice, however, that the mountain range shape of the brain wave curve for this commercial is relatively flat, with the peaks and valleys being more or less the same height. The same is not true for the memory map of the commercial shown in Exhibit 2. Some parts of the commercial are forgotten more quickly than others.



The reason for this, as we will now see, is that attention is only one of the factors that determine the long-term memories created by a commercial.

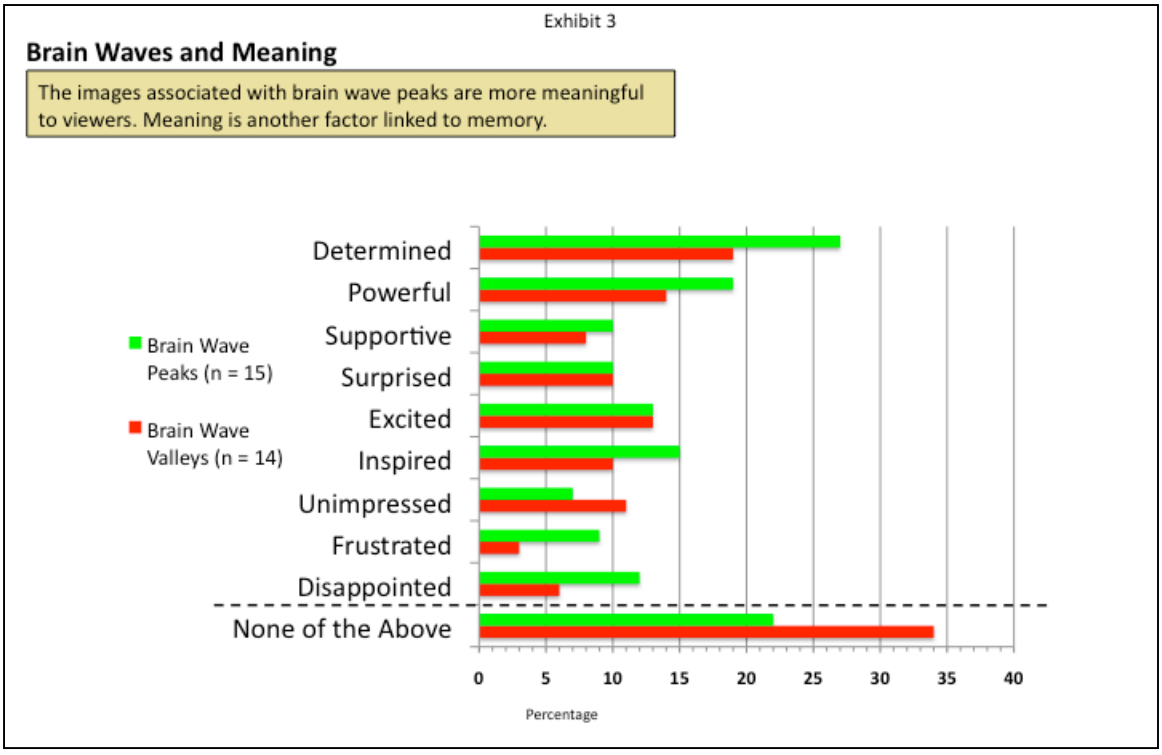
Brain Waves and Meaning

As a rule, the brain doesn't record the data of experience; it remembers the meaning of what just happened. It is the search for meaning that arouses the interest of the brain and thus generates the electrical activity that an EEG measures.

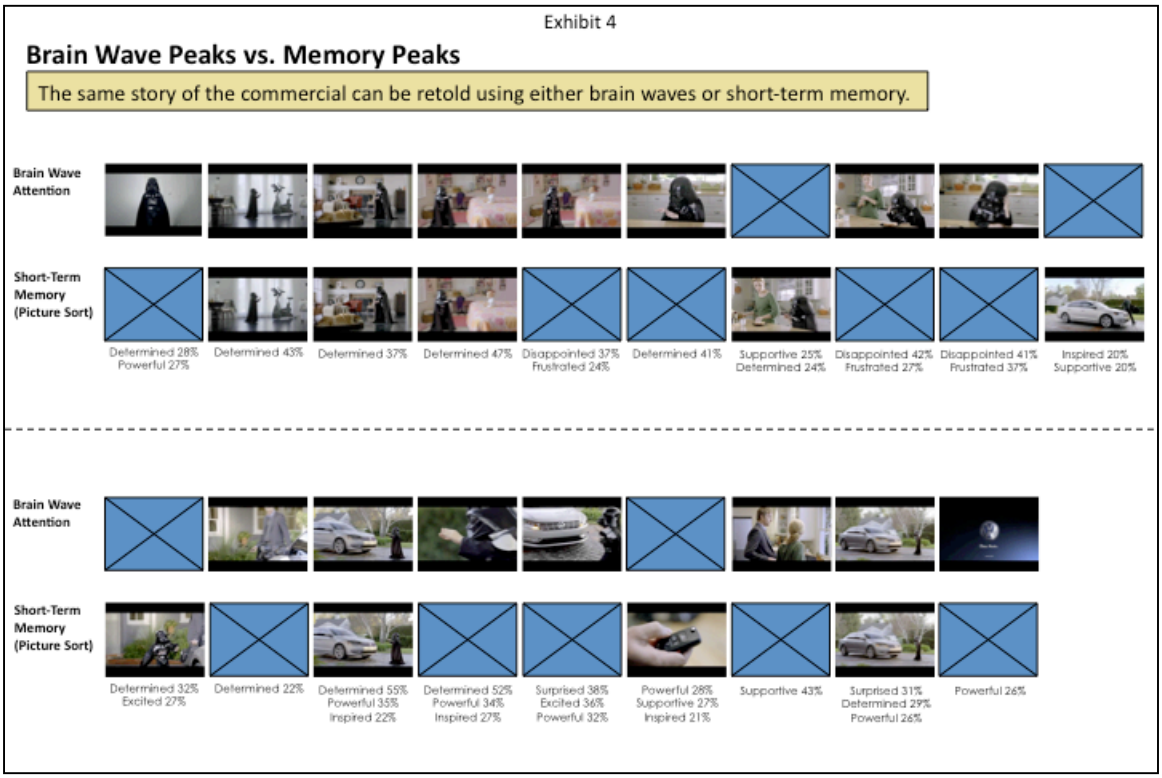
Another picture sort, the Flow of Meaning, can help us see a second commercial factor that is linked to brain wave peaks—the relative meaningfulness of each image in the ad. With this sort, respondents self-report the thoughts and feelings they experienced as they watched the commercial into one or more of ten categories of meaning based on the creative brief—or, in this case, the hypothesized strategy of Volkswagen.

In Exhibit 3, we can see the average level of meaning conveyed by the fifteen brain wave peak moments in the ad compared to the meaning conveyed by the valleys. The pattern is quite clear: Peak moments are the more meaningful moments in the commercial.

Exhibit 3



In Exhibit 4 (next page), we have laid out the peak images from both the brain wave map and the memory map in railroad track form to tell the story of the ad from the audience's perspective. To a large extent both tracks tell the same story, but with subtle differences.



The first image of the ad, for example, is more clearly a peak of interest in the real time of brain wave measurement than it is fifteen minutes later. Apparently the image of Little Darth at the beginning of the ad was necessary to establish the character and draw the audience into the story; however, the audience did not need to retain this image to reconstitute the meaning of the storyline in memory.

The last image of the ad, the Volkswagen logo, is more problematic. It's associated with one of the smallest brainwave peaks; moreover, it does not fall on a memory peak, according to the rules we use for classification. The lack of memory focus on this visual, which is not synched with any audio, may be another reason this commercial is only average in terms of brand linkage. In general, this is a common problem we see with ads in which the story ends before the ad does, so that the audience is mentally walking out of the theater while the credits roll on screen.

Other places where we see a small gap between real time engagement and memory are the moments where Little Darth feels disappointed and frustrated. As we will soon see, this could be an example of the brain suppressing negative memories—the unpleasant moments of a trip are quickly forgotten once you've reached your destination.

But a more general point to keep in mind when comparing the real time data of neuroscience with memories retrieved after the commercial ends is that the full

context of the ad is operative for the memory test. If T. S. Eliot is right, then the full meaning can *never* be measured in real time, but must be measured after the fact, once the audience has seen all of the parts of the ad in relation to each other. This would be a particularly important point to keep in mind if an ad we tested was structured as a reveal or misdirect. In such cases, the ad is designed so that the ending causes the audience to go back to the beginning to reinterpret the meaning of what came before.

Emotion and Feelings

Neuroscientists are quick to point out that "emotion" is not to be confused with "feelings"—which are only those emotions that make it into our consciousness. Emotions are presumed to be what the EEG is measuring, in each moment of the actual experience of watching the commercial as it unfolds in real time. Feelings are, by definition, what viewers are retrieving fifteen minutes later as we ask them to reconstruct their feelings as they were watching the ad.

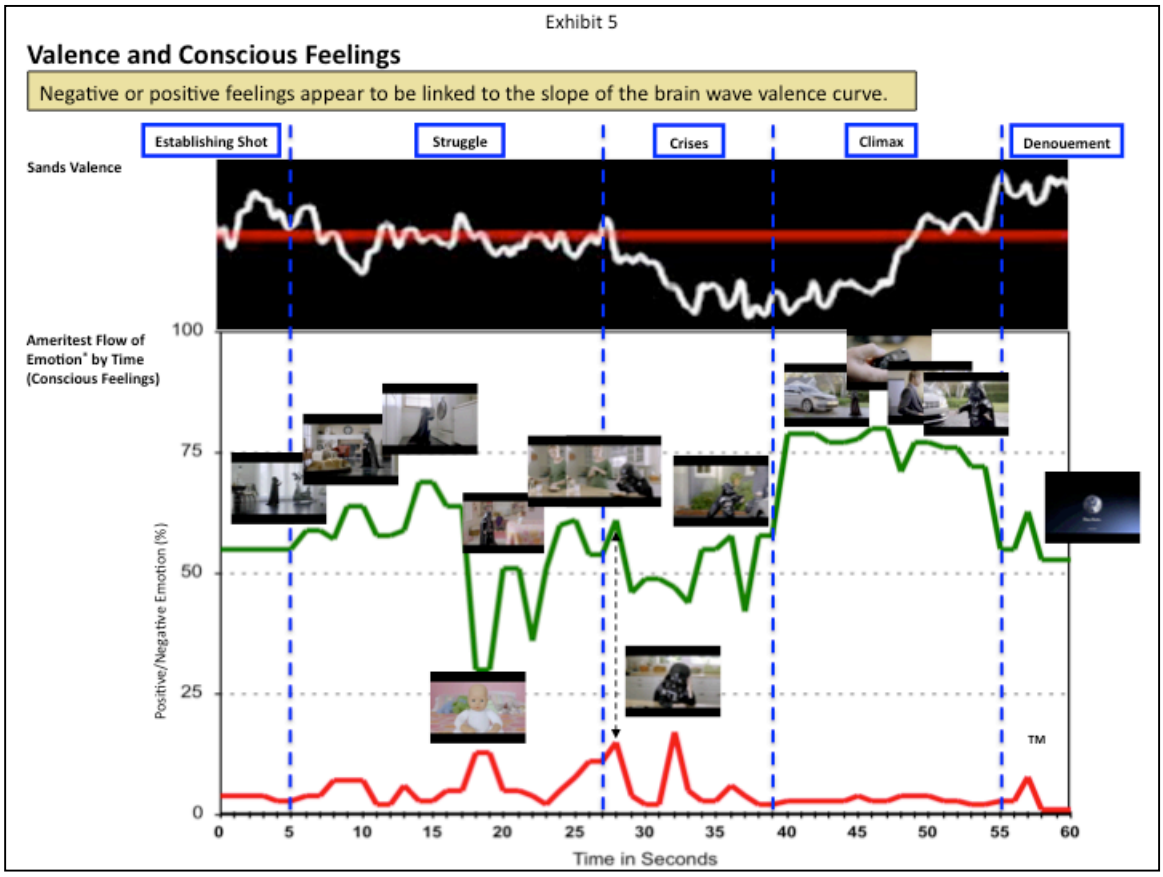
With the feelings question, it is easy to ask respondents to describe whether those feelings were positive or negative—so our Flow of Emotion graph reports both the positive and negative ends of an intensity scale.

Determining whether positive or negative emotions were aroused is more problematic. Dr. Sands derives his emotional valence by quantifying the hemispherical asymmetry in the emotional region of the brain's frontal lobe.

A comparison of the emotion graph and the feelings graph is shown in Exhibit 5 (next page). Since we are measuring two closely related yet different things it is, perhaps, not surprising that the two curves look different—but by analyzing the two graphs together it is now possible to gain new insights into how an ad works in the mind.

For purposes of comparison, I've divided the commercial into five different segments.

The first section is the opening five seconds of the commercial, when the Little Darth character is established walking down the hall, accompanied by the familiar Star Wars music. This is associated with the second highest peak of arousal in the valence curve—but it is recalled later with feelings that are only slightly above average. My interpretation of this is that, in the moment, the brain is powerfully aroused with curiosity with questions about who Little Darth is, where he is going, and what he is going to do. But once these questions are resolved, in the next movement of the ad, the initial images of Little Darth are left on the cutting room floor of the mind's memory system—they are not particularly important for reconstructing the meaning of the essential story.



The second section of the commercial lasts from five seconds to twenty seven seconds. This sequence is the progression of scenes that shows Little Darth's struggle to exert the power of the force on the objects around him—the exercise equipment, the dog, the washing machine and the doll. The brain wave emotion chart shows an up and down pattern around the zero point associated with Little Darth straining to exert the Force—and the non-responsiveness of each object. A similar alternation between positive and negative is seen in the feelings graph—though the progression of negatives seems to build so that the negative feelings around the "deadpan" doll are relatively more vivid. The difference in height between the brain wave peak and valley associated with this scene appears to be correlated with this effect.

The third section, which lasts from twenty seven seconds to thirty nine seconds, is the crises of the story, which shows a discouraged Little Darth in the kitchen, as his mother tries to support him with a sandwich. This scene is associated with a sustained turn in the valence curve to the negative, falling into the valley seen in the graph. In the feelings graph, this scene is also recalled as the low point of the story, with lowest positives and the strongest negatives associated with the images of Little Darth sitting despondent, helmet in hand. The fact that some respondents

recall these moments as low positives rather than strong negatives is likely due to the fact that, since they are recalling their feelings from memory, they know how the story will end and are reconstructing these feelings in the context of comedy—they know that the emotional pain shown in these moments is not real.

The fourth segment, from thirty nine to fifty five seconds, is the climax of the story. This is the turning point; the boy's father arrives in a new car and the undefeated Little Darth rushes outside to tap in to the power of the Force one last time—and this time succeeds, with the hidden support of his father and the radio key. This phase transition in the emotional state of the audience is shown as a turn in the Valence curve with a rapid build to the positive side—but this transition occurs even more quickly in memory, where feelings are shown dramatically shifted upwards to form the most positive section of the feelings graph. In memory, apparently, the phase transition in emotion states from negative to positive is more abrupt than what we see in the brain wave transition.

The final sequence, from fifty five seconds to sixty, is, from the standpoint of the story, the denouement—though it is the rational point of the ad: the news of the all-new Passat, starting at $20,000, from Volkswagen. This information generates a high level of excitement according to the brain wave Valence curve, though the remembered feelings are somewhat more subdued—which fits with the fall-off in attention to the ending of the ad that was reported earlier.

Copy

There was no voice over copy in this ad, which makes this a good case for comparing the brain wave research with our visual memory test, since it is not possible with the brain wave research to separate out the effects due to copy from those due to visuals. In terms of copy shown on screen, however, we did conduct a separate sort on those lines and found both the *new* of the "all-new Passat" and "starting at $20,000" to be above average in recall and relevance. In contrast, the ideas of "coming soon" and "das auto" were of only average relevance.

Putting the Pieces Together: The Essence of "The Force"

Having analyzed this commercial at a level of detail that would drive most creative directors crazy, it is now time to return to the original question: what, from the point of view of the audience, is the essence of this commercial?

My answer is shown in Exhibit 6 (next page). Given that the chief purpose of a commercial is to build a brand and that brands only exist in the long term memory of consumers, then the images in this "storyboard" are the images in that stand out as the most attention-getting, the most emotionally charged, and the most meaningful images and words in the ad—and are those that represent the essence of the ad. And what is the story that they tell?

Exhibit 6

Long-Term Memory = Attention + Emotion + Meaning

Beneath the surface attribute of *fun*, this story contributes these deeper layers of meaning—*surprisingly powerful*—to the long term brand equity of Volkswagen.

Key Ad Imagery

Determined 43% | Determined 37% | Determined 47% | Supportive 25% | Inspired 20% Supportive 20%

Powerful 35% Determined 55% | Powerful 28% Supportive 27% | Powerful 26% Surprised 31% Determined 29% | Powerful 26%

Effective Ad Copy

The all-new 2012 Passat (SUP)

Starting around $20,000* (SUP)

It is the story of a young boy who is engaged in a quest for power. After overcoming repeated struggles, the boy achieves his goal, with the support of his father, in the surprising form of a new Volkswagen Passat.

The true meaning of this commercial, therefore, is not just that the Passat is a fun car to drive—but that it's surprisingly powerful for $20,000.

This is what I have deduced, from consumer response, to be the essence of the ad. Unfortunately, I have not had the opportunity to compare this essence with what the ad's creative director actually thinks. But some evidence of the latter may be found on YouTube, in the thirty-second version of the commercial. (http://www.youtube.com/watch?v=fSPk_coqOBo)

In removing half the length of the sixty, only the opening scene with the exercise equipment and the scene with the mom in the kitchen have been lost—all the other moments in this consumer-based storyboard remain. Though there is one other difference. In the thirty, the last scene of the story is held back until *after* the supers and branding slate—perhaps to optimize brand linkage.

References

Barry, Ann Marie Seward, *Visual Intelligence*, State University of New York Press, Albany, 1997

McKee, Robert, *Story*, Harper Collins, New York, 1997