

Harness your
creative power with
advertising research



Ameritest

WHITE PAPER

Moment-by-Moment TV Diagnostic Systems: Picture Sorts® vs. Emotion Trace™

BY CHARLES YOUNG

Moment-by-Moment TV Diagnostic Systems: Picture Sorts® vs. Emotion Trace™

Recently we've received questions from clients about the differences between the Ameritest Picture Sort's® diagnostics and Millward Brown's new moment-by-moment diagnostic, the Millward Brown Emotion Trace™. The following points summarize some of the key differences and strengths of the two diagnostic approaches.

Positive Points About the Millward Brown Emotion Trace:

1. The technique has a nice "qualitative" feel about it that should make it easy for non-researchers to understand.
2. It puts renewed research emphasis on probing the emotional content of ad execution—which is quite timely given all the discussion about "emotional engagement" in advertising research circles these days.
3. It adds "color" to the discussion of emotions by making use of a fixed palette of 16 primary emotional colors that is used (a) to rate the ad as a whole and (b) as a criterion for the moving Trace curve.
4. Because the emotional palette uses a standard vocabulary, these 16 new ratings of the ad as a whole, which are measured before the Tracing exercise, provides a basis for data-basing the emotional appeal of advertising across different TV executions.
5. The Emotion Trace measurement is done twice: first, to measure the source of the "primary" emotion generated by an execution and second, to measure the sources of "other" emotions in the ad. As a senior Millward Brown researcher pointed out to us recently, this newest feature of Emotion Trace emerged from an appreciation of Ameritest's "structural approach" to analyzing how emotions change during the flow of an execution—the "e-motion" which moves consumers closer to a brand. This dynamic view of emotion is fundamental to understanding how ads work and is in stark contrast to the static view of emotions put forth by other ad testing suppliers, for example as in Ipsos-ASI's Emoticons approach.
6. Emotion Trace measures the primary and secondary emotions in an ad by having respondents take two passes of the tracing exercise and then in analysis superimposing the two different curves. As a result Emotion Trace produces much "bumpier" curves than the old Trace curves, which tended to be relatively featureless. This bumpiness in the curves highlights the importance of peak "moments" in an ad—something which Ameritest has been talking about for a long time.
7. As a moment-by-moment measurement technique Emotion Trace deals with all the communication channels of a TV ad—pictures, words, music—simultaneously. This wholistic approach may be particularly valuable in certain contexts, e.g., as when dealing with music-driven video.

Positive Points About the Ameritest Picture Sorts:

1. The most revolutionary technology affecting marketers in our time is the search engine business—how Google, Yahoo, Microsoft etc. can efficiently match advertisers with consumers. As a natural companion to this technology, Picture Sorts® deals with the most fundamental search engine of them all—the human mind. The first picture sort, the Flow of Attention®, measures how the mind googles ad film once its placed before the eye. The Emotion Trace does not have a search engine component.

2. The search processes of the mind are largely pre-conscious, dealing with the unconscious filters the mind uses in deciding what information out of streaming content is important to let into the limited workspace of the mind. Emotional relevance is only one factor impacting the unconscious scanning and sorting processes. Anticipation and suspense, film structure and syntax, temporal sequencing and duration, for example, all affect what the mind sees and doesn't see in a piece of ad film. The processes of rapid cognition—what the first picture sort measures—are the subject of Malcolm Gladwell's book "Blink," which is a highly popular read among American marketers.

3. From an advertising optimization standpoint, what the consumer does not see can provide as much insight into advertising performance (e.g., why is my branding weak?) as what they do see. But, like the blind spot in the rear-view mirror of a car, the consumer can't talk about the images they didn't see, or the lines of copy they didn't hear. Indeed, trying to understand weaknesses in television executions with verbal methods alone can be counter-productive. To quote Diane Ackerman, author of a recent book about modern neuroscience, "Here's another sleight of mind. Eye-witnesses to a crime who write down a description of a robber are much more likely to make memory mistakes about

him later. They can observe in richer detail than they have words for. When they try to recall his face, they remember what they wrote rather than what they saw. Language blots observation in what's known as 'verbal overshadowing.'"

4. All moment-by-moment techniques are essentially a form of deconstructionism—but the Picture Sorts approach takes this to its logical conclusion by separating the pictures from the words in our deep excavation of the consumer's ad experience. To complement our view of the non-verbal part of the ad, therefore, we always do two copy sorts with ads that have a significant semantic component: (1) lines of copy recalled and (2) relevance of lines of copy. There is a high degree of actionability in knowing, e.g., that a highly relevant line of copy is not being heard because of some problem with the execution. As another example, with both Picture Sorts and copy sorts it's possible to explore in depth the issue of audio/visual sync. At Ameritest we now know that there are at least seven different ways that words and pictures can interact in a TV execution or a print ad.

5. Advertising that builds brands is, by definition, advertising that creates memories. That's why recall testing is still such a dominant form of ad research used by companies like P&G, even though it's well known that recall testing penalizes emotional advertising. In extensive validations, some of which were co-published with Unilever, the Flow of Attention has been used to explain why. Peak moments that convey knowledge drive recall scores, but peak moments that convey emotion do not—though they do drive Attention measures like those used by Millward Brown and Ameritest.

6. In fact, one way of looking at the graph produced by the Flow of Attention is that it is a "map of forgetting". We've found that what's remembered in Flow of Attention peaks after twenty minutes is the only part of a commercial that shows up in long-term memory. In one pub-

lished piece of Unilever R&D, we were able to show that the first picture sort, the Flow of Attention, is predictive not only of short-term recall but also of the long-term effects of advertising—the brand memories created by ads that have been off air for five years or more.

7. According to our mathematical models, the “bumpiness” in the data that matters most in analysis is what you see in the Flows of Attention where bumps or peaks can be identified with “attentional blinks”—moments where information is being integrated and consolidated into long term memories. With our Flow of Emotion® graph, what’s important is not so much the shape or bumpiness of the Flow of Emotion curve, but rather the height of the positive and negative curves, because it’s the area under the curves that’s highly correlated (positively and negatively) with purchase intent and persuasion. (Because of the way that pictures are sampled from an ad by partitioning the emotional flow according to the changing visual content, the calculus of computing the area under the curve is done automatically so that the total emotional engagement with the ad is generated as a simple average across all the pictures.)

From an ad optimization standpoint, the Flow of Emotion curves also provide two important kinds of additional feedback: (1) depending on the type of dramatic structure used, it tells you when the optimal time is to introduce the brand (at the boundary between emotion states), and (2) negative emotions, when properly classified as intended versus un-intended negatives, can help you identify imagery that’s inhibiting motivation or persuasion (i.e. unintended negatives.)

8. The first two picture sorts taken together, through a simple quadrant analysis, gives advertisers a powerful tool to first identify and then categorize the “branding moments” in an ad. In a conversation with a senior Millward Brown researcher, it appears that they are also zeroing

in on the idea of “special moments” in an ad. With Picture Sorts, we find that these special branding moments come in flavors and are not just the “rational” or “emotional” moments in the ad. In a recent *Quirks* article we state, “Tags Are It, we identify the four different types of branding moments imagery that we have identified correspond to distinct memory systems identified by modern neuroscience researchers—Knowledge memories, Emotion memories, Action memories, and Brand Identifiers, which prevents an ad from defaulting to a category sale rather than a brand sale.”

9. The language you need to describe the branding moments that generate brand memories is fundamentally different for the three different types of memories. For Knowledge memories you need to talk the traditional language of features and benefits: at what point in the ad did you get the idea that the product is healthy, tastes good, is convenient, is a good value? For Action memories, you need to use sensory language or kinetic imagery: at what point in the ad did you get the feeling of sweetness, of refreshment, of crunchiness, of heat, of touch? (The image of touching hair is usually a peak Flow of Attention moment in a shampoo ad.) For Emotion memories, you need to use the language of the heart: at what point in the ad did you feel sadness, disgust, fear, anger, joy, surprise?

To deal with these multiple levels of meaning, we use our third Picture Sorts, the Flow of Meaning, where a different battery of “meanings” is chosen according to the specific objectives and issues surrounding a particular ad test. To focus only on emotional imagery for all ad tests is to make the same mistake that recall testing systems make, of rewarding one type of memory at the expense of the other two.

10. As we understand it, the emotional palette of 16 core emotions is based on some academic work identifying this particular set as “primary.”

Interestingly, both Ipsos-AS and ART, with ADSAM, also have batteries of primary emotions constructed from factor-analysis of emotional ratings, though each supplier comes up with a different number than 16 for what is primary. (Our own preference in this area of primary emotions is six, based on physiological analysis of the muscles involved in displaying different primary emotions on the human face.) One of the real values of the Picture Sorts, however, is it doesn't restrict you to a small, finite vocabulary for describing the full spectrum of human emotions. To quote Walter Munch, one of Hollywood's most famous film editors, who uses a picture sort like approach in editing movies, "...the most interesting asset of the photos for me was that they provided the hieroglyphs for a language of emotions. What word expresses the concept of ironic anger tinged with melancholy? There isn't a word for it, in English, anyway, but you can see that specific emotion represented in this photograph."

11. For the reason noted above, from a global brand-building perspective the Picture Sorts presents you with fewer "translation" issues regarding what consumers are responding to in film. As we've seen many times before, we expect if you compare the Flow of Attention patterns for a particular execution tested across multiple countries you'll see how reliable the Picture Sorts measurement system is.

12. For fast moving commercials with quick cutting speeds, the Picture Sorts will give you more precise insights since the picture sorting method is not tied to reaction times of respondents. For example, according to current neuroscience, there is a 0.4 second delay between perceiving something and becoming conscious of it. And of course, different respondents have different reaction times in terms of how quickly they move a computer mouse. Averaged across a test sample, there can be an error range of roughly two to three seconds about the precise moment in an ad that is being described. For

some commercials, the images on the screen can change significantly in two seconds, creating ambiguity, for example, in the diagnosis of a branding problem, or the classification of a branding moment image.

13. From an analytic standpoint, another virtue of the Picture Sorts is that all the measurements—attention, emotion, and meaning—are done for all the pictures in the ad and all the respondents in the sample. This can be very useful for analyzing sub-segments of a consumer sample since the patterns we see with Picture Sorts tend to stabilize around 20 interviews. As we understand it, with the Emotion Trace each respondent gets to vote for one primary emotion and one secondary emotion. Since different respondents are likely to cast votes for different emotions (if for no other reason than the ambiguities of emotional language) the analytic sample for any given pair of primary-secondary emotions is likely to be relatively small compared to the full test sample.

14. As we have shown in recent publications of Picture Sorts analysis of the seven-minute long internet movies created by BMW and the live, two-hour long MTV Video Music Awards Show, the Picture Sorts technique is a flexible tool for analyzing advertising as it evolves in the fast moving internet age. In contrast, the Emotion Trace seems limited to current 30-second television ads. We say this because it seems to us that you will have problem with the technique as the number of emotions operating in a longer piece of film multiply and because of the time involved in asking the question. For example, conducting the two tracing tasks for the MTV show would have added four hours to the interview length. But perhaps we don't understand the Emotion Trace technique that well.



Ameritest® is a seven-time winner of the ARF David Ogilvy Research Award including the Grand Ogilvy.