

Fast editing speed and commercial performance

Charles Young, Ameritest, argues that quick cutting enhances attention and engages the audience, to the benefit of the brand

IN AN EARLIER ARTICLE about the relationship between film editing speed and advertising performance, MacLachlan and Logan (1) analysed the relationship between commercial shot length and day-after-recall and persuasion. They noted a substantial increase in cutting speed or number of shots per commercial from the late 1970s to the early 1990s, so that by 1992 a typical commercial averaged 13.2 camera shots. They also pointed out that the average length of shot in commercials was much shorter than the shot length of the programmes in which they were embedded. In 641 commercials, they found a strong inverse correlation between the number of shots or cutting speed of the film and day-after-recall scores. They found a similar negative relationship between fast edit speed and persuasion scores, measured as pre/post preference

shift. In addition, this relationship was relatively independent of respondent age. They concluded: 'advertisers are loading their commercials with too many camera shots, and persuasion and recall are suffering as a result'. Their advice was to reduce the number of shots in commercials.

Faster than ever

Slowing the cutting speed of television commercials to reduce visual complexity seems to be a clear and unambiguous implication of this research. But despite these findings over a decade ago, advertisers continue to produce fast-cut commercials which, like the world, seem to be moving faster than ever.

Are we to assume that agency creatives and their clients are indifferent to the lessons of good research? Or is their creative intuition telling them that research was missing an essential part of the story?

To answer this, Ameritest decided to investigate the issue of speed and ad performance further.

In reaching their conclusions MacLachlan and Logan were drawing on the work of film theorist Raymond Spottiswoode (2), who proposed a theory of 'affective cutting tone', which suggested the optimal time at which to cut. The idea was to cut at the 'peak' of the content curve – the point at which the audience has just assimilated all the information in the shot. Cutting after the peak produces boredom and a sense of dragging time; cutting before the peak produces frustration and fails to convey the necessary information to follow the storyline. In advertising, too slow a cutting rate in commercials would result in boredom and a probable fall-off in attention; while too fast a rate would produce confusion and undermine learning, with a fall-off in recall and persuasion.

Fast-cutting a commercial is a way of 'speeding' through information. A useful metaphor for this is to think of your TV as the windshield of your car. If you step on the accelerator and start to speed up, the scenery in your windshield changes fast. Let up, and the scenery changes very slowly. One question we occasionally get asked by advertisers, presumably because of the published research, is 'What is the "speed limit" for editing film?' Of course, the answer is that it depends on what you are trying to do.

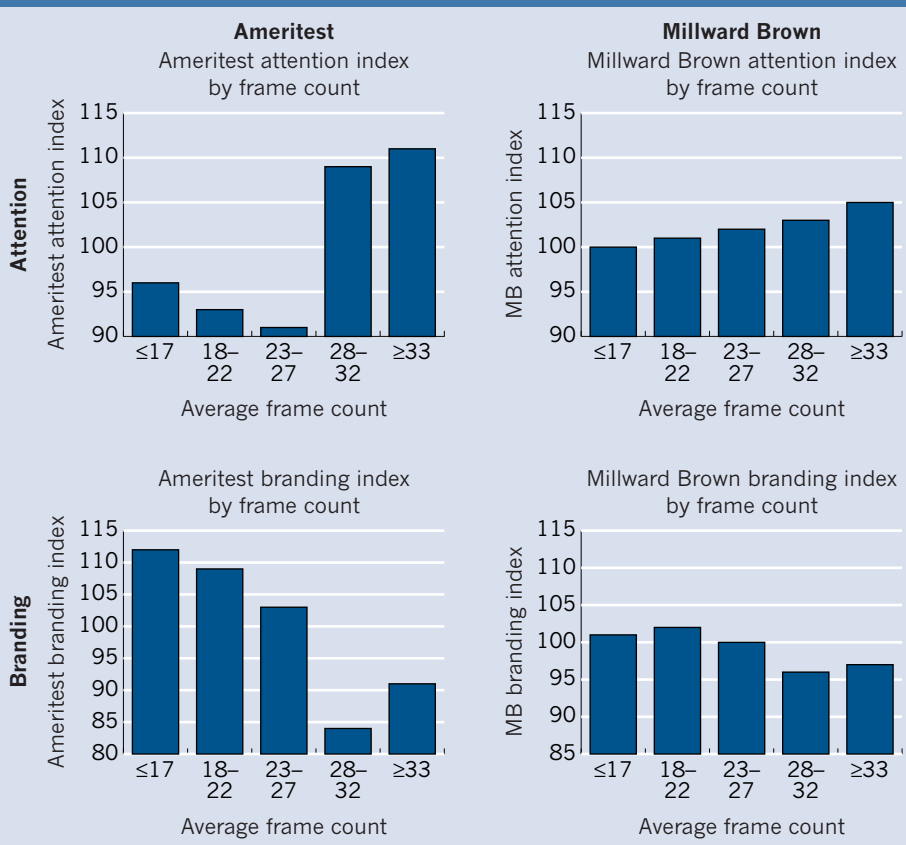
If you are trying to communicate a single, pure idea or feeling you can fix it on your horizon and speed towards it as fast as you like. A montage commercial is an example of this. If you want to communicate multiple ideas or messages, you must slow down, so that you can look around and take in this idea or that from the passing countryside. The 'speed limit' is set by the complexity of the strategic concept you are trying to communicate.

'Information speed'

To measure the rate of information flow through a commercial you could simply count the number of shots. However, camera shots can last a relatively long time, so that as the action unfolds, the

FIGURE 1

Visual complexity and ad performance



visual information present in the beginning of the shot might be perceptibly different from that in the middle or at the end. So, instead of shot length, we took as our measure of information speed or complexity the number of pictures in an Ameritest picture-sorting deck.

Counting shots is similar in concept to counting the pictures in a picture-sort deck. However, because changes in visual content within a shot are also counted, picture sorts represent a fine-tuning of the approach for analysing the effects of commercial speed. Using this more sensitive tool we replicated MacLachland and Logan's analysis, but using the performance metrics of two other major pre-testing systems, Millward Brown and Ameritest.

Taking a commercial sample from our copy-testing database, we examined 369 ads from a wide variety of categories, from high-tech to financial services. We also analysed 140 packaged goods commercials tested for Unilever by Millward Brown (which has a licence to use Picture Sorts®). Each system provides an Attention score as a measure of breakthrough power, a Branding score as a measure of branding, and a Motivation or Persuasion score based on post-viewing purchase intent. Neither system provides a measure of recall.

Each system measures attention and branding differently. Ameritest measures attention within a clutter reel, where a test commercial has to fight for attention against four other ads. Millward Brown's measure of attention is a composite of two rating statements on enjoyment and memorability; Ameritest measures how well a commercial is branded by top-of-mind brand awareness after the clutter-reel exposure, where Millward Brown uses a five-point rating of the commercial's fit with the brand. Despite these differences in the two systems, published research has shown that the systems produce similar outcomes.

Our new analysis of commercial speed and advertising effectiveness reaches a somewhat different conclusion from MacLachlan and Logan. We find a significant positive – not negative – correlation

between speed or visual complexity, measured by the picture counting method, and attention scores produced by either pre-testing system, as shown in Figure 1. Initially, the correlation appears stronger for Ameritest, but once we control for differences in product categories, the strength of the relationship is similar for both systems.

On the other hand, there is a significant negative correlation between visual complexity and both measures of branding. (Again, some of the difference between the two is due to differences in the categories in the sample.)

Recall is a combined affect of attention and branding. Taken together, these findings do not contradict the earlier research, but provide some insight into the reasons for the negative relationship between number of shots and recall. We conclude that as commercials move faster, or become more visually complex, additional

care must be taken by advertisers to ensure that their ads are well branded.

If we control for category differences and look at 120 packaged goods commercials tested by Ameritest, and compare them to 120 for similar categories tested by Millward Brown, the correlations are now quite similar (see Table 1). And when major category and brand development differences are removed, you can also look at the relationship between commercial speed and motivation or persuasion.

Column 1 in Table 1 describes the visual complexity – the speed of the ad – from the 'objective' perspective of the researcher choosing the number of pictures for the sorting deck. Replicating the findings of the earlier research, we find a statistically significant negative correlation between commercial speed and the motivation or persuasion scores in both systems.

TABLE 1

Visual processing and commercial performance			
	Number of frames	Flow of attention®	
		FOA average	Number of peaks
Performance metrics			
<i>Attention</i>			
Ameritest	0.33**	-0.05	0.42**
Millward Brown	0.38**	-0.14	0.43**
<i>Branding</i>			
Ameritest	-0.32	0.36**	-0.15
Millward Brown	-0.26*	0.35**	-0.14
<i>Motivation/persuasion</i>			
Ameritest	-0.23*	0.08	-0.16
Millward Brown	-0.31**	0.13	-0.20
Diagnostic metrics			
Liking	0.01	-0.04	-0.09
Involving	0.49**	-0.18	0.38**
Interesting	0.47**	-0.16	0.31**
Unique	0.40**	-0.03	0.41**
Ordinary	-0.27*	-0.09	-0.23*
Boring	-0.21*	0	-0.37**
Important message	-0.31**	0.02	-0.16
Relate to situation	-0.25*	0.04	-0.03
Relate to characters	-0.16	0.18	-0.11
Learned something new	0.04	-0.36**	-0.03
Confusing	0.16	-0.05	0.14

* Significant with 95% confidence
 ** Significant with 99% confidence
 N = 120 ads tested in each system – Ameritest/Millward Brown
 r = Pearson correlations



The legitimate objective of much contemporary advertising is not to 'teach' – which is what day-after-recall measures – but to pack meaningful, memorable experiences into as short a space as possible

If you look further down the first column, you can see a set of rating statements commonly used to explain the reported performance metrics of the two systems. The relationship between picture counts in the sorting decks and these diagnostics provides an insight into why the correlations occur.

Complexity promotes involvement

There is a strong positive correlation between visual complexity, the number of 'picture-bits' in the ad, and how involving, interesting and unique commercials are rated; similarly, there is a negative correlation between visual complexity and ratings of boring and ordinary. This fits with the positive correlation with attention scores. The human eye is delighted by unusual forms, colours and movement – kaleidoscopes engage attention.

But there is a negative correlation between visual complexity and how important the message is perceived to be or how relatable the situation in the ad is. Interestingly, there is no significant correlation with confusion ratings (though we frequently see problems with the flow of audience attention where consumers are not aware that they are 'confused' about

the intended message of a commercial). But these diagnostics help explain the negative correlation with motivation or persuasion scores. Fast-talking salesmen are less likely to persuade.

Now we can begin to understand why advertisers and their agencies persist in developing visually complex advertising. In an age of increasing clutter, breaking through and getting your foot in the door of the mind is paramount. The first, though not the only, job of advertising is to get noticed. And viewers will reward with their attention ads that are visually complex, involving, interesting or unique and ignore those that are too simple or slow if they are boring and ordinary.

The creative trick is to strike the balance between getting attention and being well branded and motivating.

Of course, the visual complexity of a film can be defined in more than one way. Simply counting picture-bits of visual information in the film misses the role of rhythm and tempo and timing that help organise the audience's experience of the film. All these things affect how audiences process advertising images to integrate them into brand concepts.

We have defined commercial 'speed' from an objective view of the information

flowing through the ad – an 'outsider' perspective. What if we look at the data as 'insiders', after the audience has processed the information – in other words, how the audience watched the ad.

The simplest measure of processing is the percentage of images the audience remembers seeing in the ad – a binary sort of remember/don't remember. This measure is captured in the Flow of Attention™ average in the second column of Table 1.

As you can see, the average level of recall does not tell us very much. While there is a modest correlation with branding, there are no significant correlations to any of the other metrics. The positive correlation between branding and the average level of processing suggests that better-branded commercials are those where all the information in the ad, including brand identifiers, is well integrated into memory so that recall is higher overall.

Rhythmic structure

Let us look at the key parameter used to describe the shape of the attention curve. Typically, flow-of-attention curves look like a sine-wave, displaying a rhythmic structure, with attention rising and falling and rising through the ad. This suggests that as the audience is watching images in the film, the search engine of the eye is organising information from the ad into meaningful units of information.

Images that stand out are the focus of audience attention. They are in the foreground of what the audience is looking at – or searching for – in the film, while other images around them are in the background of attention. We call these privileged moments 'peaks'.

In a recent ESOMAR paper reviewing cognitive neuroscience for advertising researchers, Page and Raymond (3) describe a similar concept, the 'attentional blink', which they also attribute to selective perception: 'It is as if the brain system 'catches' what it wants from the image stream then blinks a metaphorical 'eye' (selective attention), failing to 'see' anything during the metaphorical blink ... [R]esearch in Raymond's lab has shown that the information recalled from video

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ads depends directly on the duration and complexity of successive scenes. By lengthening some scenes or shortening others by as little as two-tenths of a second, recall of critical brand content in an ad can be drastically improved.'

Flow of Attention™ peaks are cognitive blinks. The limited bandwidth of human information-processing is reflected in the time taken for a viewer to organise information from an ad. This is a significant factor shaping audience responses to speedy, visually-complex commercials. Page and Raymond state: 'Attentional "blinks" have huge implications for creative development. These can most easily be grasped for "video" advertisements, where the workspace has to create and retain multiple representations very quickly, to enable us to understand the ad. Care needs to be taken to ensure that the workspace can create a representation for the idea or concept, or crucially, brand, before the next element of creative comes along – as it will either shove the first one out of the workspace before it can be fully assembled and used, or the process of creating the first

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representation will stop the next one even being registered.'

The importance of rhythmic structure in communications has been studied by social scientists, who have commented on the importance of rhythm and beat in language to help us organise information in a conversation to avoid cognitive overload by focusing on predictable, strategic moments to pay attention. In spoken language, the words you stress are the important ones, and you automatically speed up or slow down on the words in between, so major stress points form a regular chain of beats. In conversation, the beat is when speakers often convey key information or bring up new topics.

Film writer Robert McKee (4) describes the 'beat' as the 'fundamental unit of film structure' – though his definition is from an actor's perspective and describes the verbal and non-verbal give-and-take between actors on-screen. Our definition is orthogonal to McKee's, perpendicular to the screen. From a visual storytelling perspective, the peak moments in a flow-of-attention curve can be thought of as the beat of a co-creative dance between the director and the audience – the director can lead attention by his rhythm and pacing of visual information, but the audience must follow.

The Flow of Attention™ graph is a tool for visualising the beat of film. The fit with the theory described above and the shape of our actual flow-of-attention curves is evident. Peak moments stand out in the arc of film processing. Operationally, a 'peak' should be understood as relative, not a statement about the absolute level of recall of an image. A peak is defined locally, as higher than the other images in its 'neighbourhood', compared with images before and after.

Peak moments are those in the ad where assembly of the brand idea takes place, before the audience's 'got-it!' blink. An average commercial contains four to five peaks; but some effective commercials contain only one, as in the climax of a reveal-type ad, or even none, as in montage. The third column in Table 1 shows the relationship between the number of peaks and advertising performance.

Peaks matter

More peaks in a commercial are associated with more involving, interesting and unique executions, and hence higher attention scores in either pre-testing system. But there is no statistically significant trade-off in terms of motivating a consumer with an important message. Apparently, when we look at information complexity in terms of how it is organised in audience perceptions – specifically with narratively structured peak experiences or focused attention – the trade-off between attention-getting and persuasiveness is less of an issue.

Thus, looking at the problem of fast-paced editing or information 'speed' from either an outsider's perspective of the content of the film or an insider's perspective of how much visual information the audience focuses on, we draw similar conclusions.

This picture-sort analysis confirms what advertising creatives know intuitively. The legitimate objective of much contemporary advertising is not to 'teach' – which is what day-after-recall measures – but to pack meaningful, memorable experiences into as short a space as possible. Otherwise, in this fast-moving world, consumers will not reward advertisers who waste their time and valuable attention. ■

1. J MacLachlan and M Logan: *Camera shot length in TV commercials and their memorability and persuasiveness. Journal of Advertising Research, March/April 1993.*
 2. R Spottiswoode: *A Grammar of the Film. Berkeley: University of California Press, 1967.*
 3. G Page and J E Raymond: *Cognitive neuroscience, marketing and research. ESOMAR, 2006.*
 4. R McKee: *Story: Substance, Structure, Style and the Principles of Screenwriting. New York: HarperCollins, 1997.*
- See also C Young: *Visual connectedness and persuasion. Journal of Advertising Research, March/April 1992.*



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