‘Attention Please’

The Whitepaper

A report prepared by Bournemouth University

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With exec summary and conclusions from Magnetic

PROMOTIONAL CULTURES & COMMUNICATION CENTRE

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Introduction

The topic of attention has garnered a lot of attention in recent times; some say attention is in crisis. Combine this with the proliferation of technology able to measure our behavioural and cognitive processes, we aren't short of studies that measure attention. However, like many hot topics, attention and understanding it is not a new obsession and much can be learned from existing theory and research.

We were interested in attention because:

a) instinctively it feels like an important criterium for effective advertising

b) we were curious how the changing nature of the media landscape was influencing attention

As a start point we were keen to get a comprehensive view of the available theory and evidence so that we had a solid foundation for any new research. We believe, whilst it's important to acknowledge the seismic changes in the media landscape ushered in by the digital era, it's also important to consider the enduring nature of human behaviour. Behavioural economics, now popularised in the advertising world, continually reminds us of this. This whitepaper, prepared by Bournemouth University, is our attempt to pull together all the existing thinking on attention. It is the first phase of a long-term project 'Attention Please'. Our ambition with this programme of research is to shed new light on the topic of attention, unearthing useful insights and frameworks for advertisers and their agencies. Ultimately, we want to make the link between attention and effectiveness more apparent so that attention as a topic can be fully appreciated as an important consideration for anyone involved in the business of advertising.

Executive Summary

Attention is challenged due to an overabundance of information brought about by the digital age. Our digital environments routinely interrupt our attention - we self-interrupt and are interrupted by digital disruptions like daily notifications. Android sends out 11 billion notifications per day, and on average, consumers check their phone 150 times per day for short bursts of 30 seconds. An interruptive strategy to capture our attention contributes to declining attention.

In a context of increased information supply and decreased attention, attention is a very valuable commodity. If we want to reverse this trend we need to focus our attention on 'quality attention' this will ensure a more sustainable approach to attention.

Attention is routinely measured as time spent. While this is easy to measure, it is not an accurate predictor of 'quality attention' or 'time well spent'. We routinely spend lots of time doing things without paying much attention. Travelling is a prime example. Many of us spend a number of hours travelling per day, yet it's typical for us to experience a journey from one destination to another by foot/by car without taking full notice of how we got from A to B.

To capitalise on the attention opportunity, we need to consider the kind of attention that is required to achieve marketing objectives. A range of Attention theories provide a useful framework when it comes to understanding attention in the context of consumer decision making.

Theories of top down and bottom up attention underline that it's important to consider implicit /semi-conscious attention as well as conscious focused attention.

These perspectives place different emphasis on conscious and semi-conscious/unconscious attention in advertising effectiveness. However, there is consensus that goal direction is a key precursor of attention. The presence of systematic processing goals' has been shown experimentally to increase the attention paid toward advertising.

This is because the goals that direct our attention are linked to the way we process information. For example, utilitarian goals, such as finding a product that meets a functional need, these are processed cognitively. Or on the other hand expressive goals, such as does this product suit my self-image, these are processed emotionally.

Attention is typically measured as time spent or via the use of eye tracking. Whilst eye tracking has become more sophisticated due to the availability of cost-efficient measurement technology, it still only captures behaviour in the moment and doesn't take account of attitudes. To fully understand the attention opportunity, we also need to consider how the goals that direct our attention influence attention, as well as take account of wider contextual factors such as how media and advertising is experienced and the relationship the consumer has with the advertised brand; these factors will also affect attention.

However, to fully appreciate the benefits of quality attention we need to better measure the relationship between attention and desired outcomes such as advertising recognition, brand consideration and purchase.

This paper outlines a model for attention that takes account of all of the above considerations, presenting a way forward for attention studies in the future.

The Attention Challenge

Attention is generally defined as a mental activity or energy that can be distributed to different tasks (Wedel, 2013). Attention is also a finite resource which is purposely deployed or cultivated to realise an intention or goal (Csikszentmihalyi and Rochbergh-Halton, 1981; Williams, 2018) and because of this it is selective. There have always been competing demands on our attention - work that needs to be done, friends to talk to, meals to be prepared, movies to watch. However, competition for our attention has intensified as a result of the proliferation of information and media - in particular, digital. Not only is there more media and more content across media, but consumers are engaging simultaneously in multiple media tasks like watching a film while browsing eBay (Angell, Gorton, Sauer, Bottomley and White, 2016), with seven out of ten people multitasking while watching TV (Microsoft Research, 2014).

This has given rise to an Economy of Attention (see Celis, 2017). As Simon (1971) explained, in an attention economy there is an inverse relationship between the availability of information and attention. When information is scarce, attention is vast, when information is vast, the opposite is true (Simon, 1971; Williams, 2018). While attention is in short supply, demand for consumer attention has increased.

In a context of increased information supply, but decreased attention, attention is a very valuable commodity (Davenport and Beck, 2001; Celis, 2017; Williams, 2018). Attention costs have increased sharply since the mid 1990s (Teixeira, 2017) (see Table 1). Despite increased advertising spend, consumers are devoting less attention to branded communication. To illustrate, a study carried out by Lumen concluded that only 35% of digital ads are viewed and of these, only 9% received more than a second's worth of attention (Marketing Week, 2017).

Research attributes this decline to ad clutter, growing distrust of advertising, media proliferation and multitasking (Teixeira, 2014). Consumers have other trusted sources of information and entertainment, which have corroded the value of advertising. Whereas in the past consumers may have engaged with advertising to gather information to inform purchase decisions, today those needs are more easily met through web searches.

Table 1: Rising costs of advertising across media in the UK

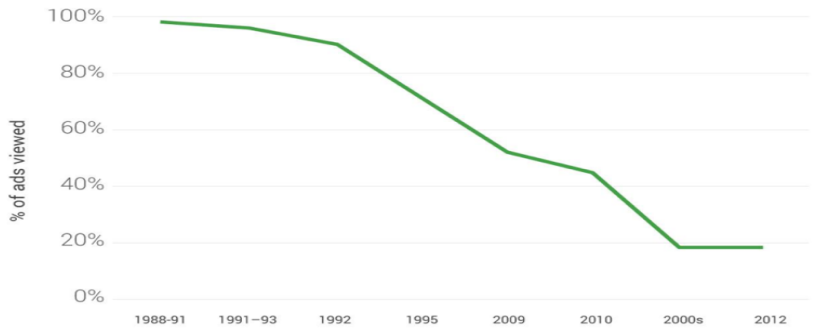
	Adspend 2016 (£m)	2016 v 2015 % change	Forecast 2017 % change	Forecast 2018 % change
Internet	**10,304**	**13.4%**	**8.5%**	**7.6%**
of which mobile	3,866	45.4%	30.4%	20.8%
TV	**5,277**	**0.2%**	**-0.5%**	**3.0%**
of which spot advertising	4,730	-0.5%	-1.4%	2.4%
of which broadcaster VoD	197	12.6%	13.7%	11.0%
Direct Mail	**1,713**	**-10.4%**	**-7.5%**	**-6.0%**
Out of Home	**1,106**	**4.5%**	**3.4%**	**2.3%**
National newsbrands	**1,101**	**-10.0%**	**-7.4%**	**-7.2%**
of which digital	230	4.9%	1.9%	1.4%
Regional newsbrands	**1,021**	**-13.2%**	**-8.6%**	**-8.3%**
of which digital	193	-3.4%	0.2%	1.0%
Magazine brands	**877**	**-6.8%**	**-5.1%**	**-4.6%**
of which digital	282	0.2%	3.3%	3.7%
Radio	**646**	**5.4%**	**3.3%**	**2.6%**
of which digital	28	35.0%	21.3%	18.7%
Cinema	**257**	**8.0%**	**5.3%**	**3.6%**
TOTAL UK ADSPEND	**21,372**	**3.7%**	**2.5%**	**3.3%**

Source: Marketing Week, 2017

Programmatic advertising in particular has contributed to this over supply of information. Consumers feel bombarded by low quality click bait advertising, which is designed to grab attention by reaching the most eyeballs to create the most impressions and conversions (Williams, 2018). Attention grabbing strategies are based on the premise of interruption and therefore capitalise on a low quality attention which overtime deteriorates the effectiveness of advertising and consumers' relationship with advertisers.

Attention grabbing strategies negatively relate to consumers' ability to attain their own goals- for example, spending time with family, learning how to play a new instrument or lose weight (Williams, 2018). Interruptions have been linked to negative effects in terms of productivity and wellbeing (Stone, 2008, Williams, 2018). Interruptions generated by low quality advertising content hinder us from doing what we want to do, being who we want to be and wanting what we want.

Figure 1: Decreasing attention to ads



Source: Teixeira, 2014

While programmatic advertising capitalises on poor quality attention that is measured crudely in clicks and impressions, it denies advertisers opportunities to capitalise on a deeper, more meaningful measure of attention. Attention that can be cultivated over time.

At the same time, there is growing evidence that consumers demand for quality content is increasing. In a study conducted by SaaS and Moat, quality print media brands in 2017 outperformed benchmarks from 16% to 73% (Moat Q3, 2017). Average active dwell time on page was 72% higher and in-view time 51% higher than 2016. This means that consumers are rejecting attention grabbing interruptions produced by 'bite sized, click bait headlines and enjoying the long form content created by quality media brands' (Moat Q3, 2017).

In order to capitalise from higher quality attention, new studies of attention (Teixeira, 2017) are re-emphasising the need for strategic thinking in determining the kind of attention that is required to achieve marketing objectives and the best media mix to deliver it (Edelman and Teixdera, 2014; Teixeira, 2017). **Advertisers need to understand the attention potential of media** (Edelman and Teixeira, 2014; Briggs, 2013; Carderelli, DeMontigny, Eadie and Havlena, 2007; Bickel, Cleveland and Wood, 2013) (See figure 2).

Attention must be 'won' and 'cultivated' over time by addressing and responding to personal goals. As Kevin Kelly (2008), founder of Wired Magazine puts it: '**The only way to win customers in the attention economy is to make something worth paying attention to. People don't respond to facts about how your product will fill a practical need, they respond to stories about how it will fulfil a personal desire**'.

The value of magazines is that they garner high quality attention that can be cultivated over time. They don't interrupt and grab attention. They are solicited by readers who choose to invest their attention in them – their editorial, features *and* advertising – often paying a premium (Belk, 2001).

Figure 2: From attention grabbing to attention cultivation

Buy right: Stop wasting money on “spray and pray” media.

Maximize attention by optimizing the creative factors you can control.

Build up customer attention over the long run.

Source: Teixeira, 2014

Attention in Theory

Key Definitions

Generally, studies of attention in advertising effectiveness are based on cognitive or social psychology models of attention. Attention, as a purely psychological measure is generally understood to be a form of mental activity or energy that can be distributed to different tasks (Wedel 2013). Other definitions include:

- mental process of concentrating effort on a stimulus or mental event
- limited mental energy or resource that powers the mental system
- cognitive process of selectively concentrating on one aspect of the environment while ignoring other things-examples include the cocktail effect (listening to someone carefully while ignoring other conversations)

Attention has two dimensions: **intensity** and **duration**:
Intensity: A measure of the quality of attention during an interval

Measurement: In a lab setting, eye-tracking technology now allows researchers to indirectly measure quality of attention to specific objects such as product packaging by combining gaze location and duration.

Duration: A measure of the length of fixation of attention only

Measurement: Duration measures quantity of attention (which is easier to measure than quality). Duration, however, is not a good proxy for attention (e.g. the length of a particular car journey doesn't vary, but sometimes attention is more focused on driving than others).

Existing Theoretical Perspectives

Here we outline the existing theories of attention. You will notice there are some shared principles across these theories.

There are three broad theoretical perspectives for the study of attention: 1) Capacity Theories that privilege cognitive attention as best predictor of advertising effectiveness, 2) Low Attention Theories that draw attention to the powerful effect of low attention in advertising effectiveness over time and 3) Top-Down, Bottom Up theories that acknowledge the relative power of cognitive and emotive attention in driving advertising effectiveness.

Capacity Theories

The first perspective in consumer and information processing research were based on Kahneman's (1973) *Capacity Theory of Attention*. Attention was understood as a necessary first stage of persuasion which led to more complex processes like being interested, deciding and taking action (Ephron *et al.,* 2003). Capacity Theory assumes attention is a limited resource that is invested in relation to the mental effort that is needed to realise a goal or momentary intention. The attention consumers allocate to an ad is determined by consumers' motivation, opportunities and ability to process (Petty and Cacioppo, 1982).

Motivation to pay attention is determined by how relevant consumers think message consequences are to themselves and/or important others.

This kind of conscious or cognitive attention is regarded to be a key element for successful advertising, and extensive research based on the Elaboration Likelihood Model has found that being attentive forms attitudes that are more enduring, resistant to change and can be more predictive of behaviour (Bagozzi, 2002; Petty and Cacioppo, 1986). If there is low attention because there is little personal relevance or ability to process a message, persuasion will happen through available heuristics (e.g. music, creative execution). This type of persuasion relies on affect (influences emotions and feelings) and requires longer periods of repeated exposure to be effective. Advertising effectiveness is said to be weaker because it is reliant on emotional responses. In respect of processing and learning from advertising, high attention fully conscious thinking is called 'active learning' and produces changes in the explicit memory (Heath, 2007).

Low Attention Theories

An alternative low attention theory for understanding advertising effectiveness was first introduced by Krugman in the mid 1960s. Krugman (1965) provided a semi-conscious, low processing account as a contrast to the high attention/high involvement capacity theories. He provided evidence of low, semi-conscious processing of advertising by measuring brain waves of respondents exposed to TV advertising and print advertising. Later experiments by Shapiro, MacInnis and Heckler (1997) demonstrated that ads could affect product considerations even when respondents claimed not seeing them. It is repeated exposure over time, not active thinking, Krugman (1977) argued, that lead to advertising effectiveness.

Drawing on developments in the field of psychology in particular Zanjoc's (1980) observation that affect/emotion precedes cognition, low attention theories evolved mainly through contributions made by Heath (Heath, 2001a, 2001b) to emphasise implicit learning and non-cognitive processes. According to this perspective, consumer choices are made in time poor environments (e.g. a busy supermarket), therefore decision-making tends to be more intuitive and emotional. These intuitive choices have been shaped through learning acquired semi-consciously (Damasio 1994). Although it is acknowledged that passive learning does not lead to strong attitude formation or change it can produce change over time by creating and reinforcing positive associations. These associations can carry an affective component, which Damasio (2000) explains happens in implicit memory in an automatic fashion, bypassing the need for conscious or attentive thinking.

Effects are produced in implicit memory, where what is perceived (seen and heard) is stored, in addition any simple meanings associated with the stimuli are also retained. Because there is meaning attached to what is stored in implicit memory it can exert influence on decision-making (Heath and Nairn, 2005). Heath has argued that this memory is independent of attention. Semi-conscious/sub conscious processing happens below conscious attention. Eysenck and Keane (2000) have highlighted distinctions between learning happening in the subconscious as implicit learning and passive learning as low attention, semi-conscious thinking.

Top-Down, Bottom-Up Attention Theories

Top-Down, Bottom-Up theories of attention focus on different levels of attention depending on the relative importance of an individual's goals in controlling attention and the role of stimuli.

Generally the approach is framed by principles of Behavioural Economics that have popularised the idea that there are two systems of thinking (Kahneman, 2011):

2 System 1: Intuitive, automatic, effortless, associated, fast, linked to emotions, unconscious
3 Systems 2: Controlled, effortful, deductive, slow, self-aware

Top down attention is attention that is wilful, deliberate and controlled by an individual's goals and therefore is goal driven (Eysenk and Keene, 2000; Corbetta and Shulman 2002). This type of attention produces fully conscious, active learning and produces changes in our explicit memory. In the top-down mechanism we make use of more cognitive strategies that we have developed over a longer period of time, and therefore requires more time (200 ms or more) and cognitive effort (Itti and Kock, 2001). Our attention is biased towards objects we choose because we have prior experiences with them, to cite Connor et al. (2004, p. 850) 'we consciously attend to such stimuli because we believe that they are salient to us and hence require conscious, voluntary attention'.

On the other hand, bottom-up attention or passive attention is stimulus driven (Eysenck and Keane, 2000) and results in subconscious, implicit learning. E.g. red fruit in a green field pops into this stage of attention because sensory data catches attention in a bottom up way. Bottom-up attention is said to occur automatically at a speed of 50 milliseconds (ms) per item (Itti & Koch, 2001) and precedes top-down attention (Geske and Belur, 2008). Bottom up attention is seen as operating pre-cognitively, emotionally and automatically. In his latest work, Heath (2009) equates this type of attention to the amount of 'subconscious feeling going on' when advertising is being processed.

Of course, at any point in time, one's attention is guided by some combination of top-down and bottom-up attention. A very salient advertisement can capture one's (bottom-up) attention when involved with unrelated tasks, or (top-down) attention can be directed toward an advertisement because it is relevant to the task at hand (Jessen and Rodway, 2010). Attention also is known to fluctuate between more focused and dispersed states over a relatively short time course (~seconds) and has been shown to occur when viewing advertisements (Wedel, Pieters, and Liechty, 2008).

Summary Observations

These three theoretical perspectives continue to be used in contemporary research on attention. There are ongoing debates as to whether Capacity Theories or Low Attention Theories more accurately describe and measure attention or whether cognitive attention or emotion (low attention) deliver advertising effectiveness (see Teixeira, 2014; Heath, 2009). However, there is consensus that both **content characteristics** and **personal goals** mediate attention and the processing of advertising and its effectiveness. While these perspectives place different emphasis on conscious and semi-conscious/unconscious attention in advertising effectiveness, there is consensus that goal direction is a key

antecedent of attention (see Heath et al. 2009). To cite Heath et al. (2009): ‘One thing that has been shown experimentally to increase the attention paid toward advertising is the presence of systematic processing goals’. All perspectives have tended therefore to manipulate conditions of relevance (to generate low or high attention) and message characteristics to induce attention

The Link between Relevance and Attention

As shown in the previous section, the link between attention and relevance is recognised across key theoretical perspectives. For example, low attention theories and capacity theories, both emphasise the importance of personal relevance and content characteristics in arousing attention. In newer studies of attention there is a renewed recognition that message relevance drives attention (Teixeira, 2014)

In this context any study of attention needs to consider the influence of underlying goals and how they direct our attention. We develop this perspective of attention by using the work of Csikszentmihalyi and Rochberg-Halton (1981) and extend it to consider the types of attention and information processing related to goal-type. Csikszentmihalyi and Rochberg-Halton (1981) tell us that the mind begins to wander when it does not have organised sensory input - people require an external order to keep randomness from invading their mind - we need external objects and scripts to maintain a sense of order, stability, boundaries and direction. From this perspective attention is a means to attain goals. As Csikszentmihalyi and Rochberg-Halton (1981, p.5) argue 'attention is the medium through which intentional acts can be accomplished'. Therefore intentions direct attention through which information is selected and processed in consciousness in order to realise some ultimate goal.

James Williams (2018, p. 46) writes: 'attention becomes the question of having the freedom to navigate your life in the way you want'. Realising our goals therefore requires attention, but attention is finite, so understanding what we choose to pay attention to is important. We can only focus on a limited number of pieces of information - attention requires effort to concentrate. We choose what we pay attention to, so the act of focusing is wedded to our life, our identity projects and goals. We find that consumers can pay attention to media because they want to realise their goals. These goals may be functional in nature (**utilitarian goals**) or emotional (**value-expressive goals**) (Park and Mittal, 1985).

Utilitarian Goals

Utilitarian goals have to do with the acquisition of knowledge and skills necessary to carry out everyday practices like driving, fishing, cooking, parenting, etc. (Warde, 2005; Watson and Shove, 2007). Utilitarian goals may also drive attention when an individual is highly concerned with the cost benefits rendered by a product or service and interested in the functional performance. In this instance, attention is placed on content that will enable the reduction of risk associated with everyday practices (Park and Mittal, 1985). Within a context of consumer behaviour, risk will be associated with the intrinsic quality of goods or services. E.g. Will this car work? Is this new medicine dangerous? Will this purchase be a costly mistake? These goals have to do with acquisition of knowledge and skills to increase the level of competence (e.g. ability to organise an affordable holiday) or to reduce risk associated with everyday practices.

Importantly, **functional or utilitarian goals motivate/involve the cognitive processing of information.**

Cognitive Processing

Information is processed analytically, predominantly based on propositional systems (text-based list of attributes or features (i.e. more detailed, written information) (Park and Mittal,

1985). According to cognitive response theory, rather than passively accepting or rejecting the content of a persuasive message, people actively generate cognitive responses supporting arguments, countering arguments and derogating sources. The effectiveness of a message depends less upon the message content than it does on the cognitive responses that are generated. **By its very nature, cognitive processing requires high attention, high involvement processing from the audience**.

Value Expressive Goals

Value expressive goals are linked to self-identity. According to the value expressive motive an individual is more interested in enhancing their self-esteem by projecting a desirable image. These goals are explained by the reactive view (Dichter, 1960) of consumption which emphasises emotional responses and symbolic product imagery in which both conscious and unconscious thoughts, moods, wants and feelings surround and sustain the consumption context. According to this view, consumption entails experiences wherein consumers derive hedonic gratification or engage in fantasies feelings and fun (Holbrook and Hirschman, 1982). One reacts to messages, one has urgency to give in to temptation, there is no predictive quality to it, it is a heightened emotional state. Advertising is actively sought to shape/feed the consumer imagination (Belk, 2001; Belk et al, 2003), which tends to focus on a desire for transformation to an ideal state of being (ideal self) – consumer goods and services (via advertising) hold the promise of actualising this transformation and thus drives contemporary consumption (Campbell, 1987; McCracken, 1988; Belk et al 2003) It can be linked to the fact that individuals can be driven by the motivations of enjoyment and reward when they pay attention to ads in magazines. As may be expected, **value-expressive goals entail affective or emotional information processing.**

Affective/Emotive Processing

When value expressive motives are aroused they are processed affectively/emotionally. As Park and Mittal (1985) explain, experiential consumption is also considered whereby products are assessed on their aesthetic qualities. They are assessed at an experiential level and as such, advertising should appeal to these dimensions.

Affective or emotional processing is sub or semi-conscious (Heath, 2007). Affective processing can be defined as feeling-based processes that are distinct from either evaluation (i.e., liking) or purely descriptive cognition (Cohen, Pham, and Andrade 2008). Emotional engagement can be intense. Isen's (2001, p.77) study identifies that when women find an advertisement that depicts the mood they seek, they engage in 'deeper, richer, thinking', which is promoted by positive affect.

From this broader perspective, it is apparent that channelling attention contributes to our well-being. Without something to channel our attention to, we struggle. Our goals – whether utilitarian or emotive (value-expressive) – and intentions (to accomplish a goal) direct attention. Attention is therefore meaningful – it not something simply to be 'grabbed' in the hope of promoting a brand or product – but is deeply linked to everyday life, the self, our goals and aspirations. As such it is necessary to understand what goals motivate individuals to pay attention to, engage with and respond to advertising. Much of this speaks to the work of the imagination – how one views the future, visualises their ideal self, and how they seek to attempt to realise those ideals in the material world. The realisation of ideals and goals is where advertising speaks to consumers and can capture and cultivate attention. These broader life goals and identity projects are acknowledged but not studied in attention-based

research and form a key component of the naturalistic research that is yet to be carried out in the field.

The Power of a Relevant and Positive Context

It has been found that the positive influence of media context on reception of ads and brands increases when a particular text (editorial, news story, commentary) elicits positive emotions (Aylesworth and MacKenzie 1998; Mathur and Chattopadhyay 1991) when consumers have a low level of engagement with the product advertised. This happens because the congruency between media context and advertising message make the relevant knowledge, mood structures and associations elicited in the processing of the advertising message more salient (De Pelsmacker et al. 2002; Goldberg and Gorn 1987; Perry et al. 1997). Existing research has also shown that a congruent media context enhances the perception of need and triggers consumers motivation to process ads for context-congruent products.

Media Environment, Creative Impact and Attention

Some media may provide an environment that fosters more attention; similarly, better content may drive more attention. Next we look at the impact of media environment and creative impact on attention.

TV and Print Advertising are Processed Differently

Heath and Feldwick's (2007) work indicates that the average attention paid towards TV advertising is between one third to one half that paid towards newspaper advertising. Compared to print advertising, TV advertising is low involvement. More revealing though was the nature of processing involved. Processing of print was found to be goal-driven with careful and systematic scanning of the pages. 'Sometimes ads were briefly fixated, sometimes carefully read, sometimes avoided altogether, but never did the eyes wander over the paper aimlessly'. (Heath, 2007, p10). What this suggests is that TV and newspaper processing are quite different. Newspaper processing appears to conform to the systematic goal-driven and active 'top down' processing of the information processing model, whilst TV watching is termed as low involvement processing.

An important result from that study was that print media can be potentially as effective at engaging consumers' feelings and arousing attention as TV (Heath, 2007). As Heath (2007, p.16) argues:

> 'This challenges the long established myth that print and other supposedly secondary media are less well equipped to engage consumers than TV. Print is often used as a medium for communicating information, but these finding suggest its use as a brand-building media is perhaps something which more advertisers should consider.'

This is confirmed by comparative studies. For example, a comparative study looking at eight different media contexts, including newspaper, TV, radio, free local papers, magazines, non-news websites, mail and film (Bronne and Neijens, 2006) found a particularly high correlation between media context and advertising effectiveness for print media like magazines, newspapers and free local papers. This is the case because of the specific nature of media titles that are more likely to attract a particular type of reader/consumer, which makes it possible to tailor advertisings to better meet the profiles of magazine brands. Another advantage over other media contexts studied was the higher level of integration that could be achieved between news content and advertising. A rare piece of research (Calder, Malthouse and Schaedel, 2009) that looked at digital news content found that increased engagement with content also positively affected advertising.

Magazines and Quality Attention

The value of magazines as a context for advertising can be sustained on the grounds that because it demands more cognitive effort from readers in engaging with the content, it improves consumers' engagement with the commercial content too. In addition to this, over time, magazine brands themselves come to prime the reception of advertising messages, by transferring positive meanings associated with that magazine to the commercial content embedded in it. A pioneering piece of research (Appel, 1987) analysed eight previous

studies on the supposed link between editorial environment and advertising effectiveness, and determined that there were positive correlations. Appel (1987) found that for those respondents that regularly read and liked *The National Enquirer* their evaluation of advertising placed there was much more positive than for non-readers who overall disliked that media context.

Editorial engagement or editorial induced effects generates more positive attitudes towards advertising and the products advertised (Martin, 2003; Lord, Burnkrant and Unnava, 2001). These media induced effects have been dealt with elsewhere as a direct effect produced by positive emotions elicited from engaging with a particular media context (Aylesworth and MacKenzie 1998; Goldberg and Gorn 1987; Coulter 1998; Murry, Lastovicka, and Singh 1992; Chingching, 2011).

The Challenge of Ad Avoidance

Because magazine readership is actively sought it is not prone to avoidance rates as other media (including digital) are. Consumers often choose to change channels in order to avoid TV ads, they click away or skip video ads online on Youtube, and ignore/discard direct mail without reading it (Tuchman, Nair & Gardete, 2017). Teixeira (2014) compared ad-skipping rates across a variety of populations, ads, and brands (based on the percentage of ads viewed completely divided by the total number of ads shown). Before 1992, ads were considered viewed, or fully attended to if the channel was not changed, of course viewers might not be looking directly at the TV screen during this time so Teixeira used eye-tracking , to account for this. In the early 90s ads considered fully viewed and getting high attention was 97%, by 2014 this figure was less than 20%.

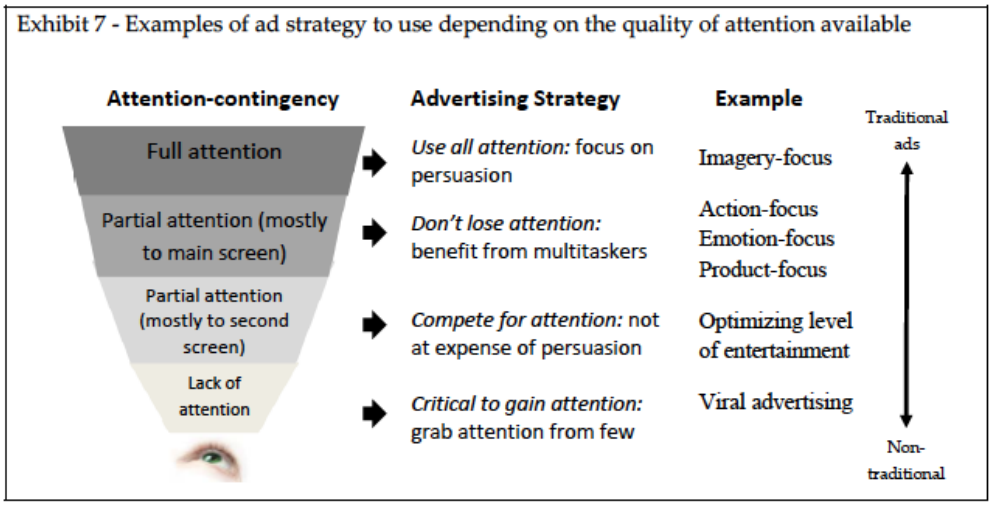
TV processing is predominantly automatic, stimulus driven 'bottom-up' processing (Heath 2007). This is frankly no great surprise. TV is watched primarily as a form of relaxation, and as Tellis (1998, p121) eloquently points out, consumers '... do not yearn for ads'. Clancey (1992) reveals two thirds of respondents are doing some other activity when watching television, and Soley (1994) quotes various studies which find between 20% and 40% of people leave the room when the advertising breaks are on.

Work with the Type of Attention a Media Offers

Teixeira (2014) has recently put forward an attention contingency with four types of attention that takes into account media multi-tasking (see figure 3):

1) Full attention
2) Partial attention (to primary content)
3) Partial attention (to secondary content)
4) Lack of attention

Figure 3: Attention-contingency



Source: Teixeira, 2014

Another important addition in this later work is the requirement to identify advertisers' own goals in relation to the kind of attention they need. Advertisers need to start by understanding the attention potential of each media. In a movie theatre or print magazine, an ad is going to get high quality attention (Edelman and Teixeira, 2014). The implication being that advertisers and their media planning agencies first need to **determine the attention potential for their brand, their category, and the media they buy and the attention that they can get**. Teixeira (2007) labels this the 'attention gap' and has developed an Attention Advertising Model (ACAS) where he outlines a four step approach and media solutions per attention requirement:

1) Establish Purpose of Advertising (Desired outcome, remind, inform, change attitude, build brand)
2) Determine the desired type of attention required (attention-contingency) against the type of attention you can get
3) Choose appropriate strategy to match quality of attention available (media/publication type)
4) Create ad content that develops attention over time

The Importance of Measuring Context and Outcomes

Attention is typically measured via time spent or using eye tracking approaches. With these approaches there is too much focus on measuring attention but not understanding its drivers: **The problem of just focusing on the physiological response to attention is that we can't capture meaning attributed to what is seen and read or the importance of this in everyday life**. It also fails to capture the reasons why consumers may deem content of importance to them or loved ones. Or why they may engage with desirable behavioural outcomes (from purchasing, but also in disseminating content).

Ultimately, the context and way in which attention is directed and content processed leads to a variety of outcomes and these elements need to be identified and measured as well as measuring attention directly.

In the top down processing mode, attention is deliberate and goal driven. It is likely to be the sole focus of attention. In bottom up processing mode, attention is low level or semi-conscious and more stimulus driven. It is likely to be when an individual is multi-screening and multi-tasking. It is possible to measure both of these types of media consumption behaviour to determine the type of attention a media has the potential to achieve.

When it comes to bottom up/ implicit attention and outcomes this is usually measured as recognition. Heath and Nairn (2005) stress recognition can help gain insights into both explicit and implicit memory, providing a more accurate idea of the actual level of advertising exposure and effectiveness.

Creative Impact and Attention

The characteristics of an advertising message - the quality of arguments, headline, copy block, size, illustrations - are said to arouse consumers' attention (Rossiter 1982). The impact of message characteristics has been studied within the context of information processing (Celsi and Olson, 1998; Petty and Cacioppo, 1986), relying on recall and memory scales to determine effect.

Newer attention studies also relate the type of attention with content characteristics, which is consistent with the earlier capacity studies. Emotive or entertainment content works better in conditions of 'lack of attention' where more complex stimuli (imagery and focus) designed to generate cognitive response (awareness, attitude) are more effective in conditions where attention is full.

Researchers continually suggest a dual influence of creativity on attention in that creative content characteristics both attracts initial attention to advertising and increases the amount of attention already directed to it (e.g. Sasser and Koslow 2008; Smith and Yang 2004). Connor et al. (2004) have also concluded that simple visual characteristics such as colour, shape and orientation become salient or important in the attentional focus in the very early stage of visual processing, whereas features that require the top-down attentional mechanism will occur at a later time in the stage of perception and will involve sensory inputs from higher cortical areas of the brain (Geske and Bellur, 2008)

Research also suggests that if advertisers wish to build strong brands then emotional engagement is more important (Heath Brandt and Nairn, 2006). But it is well accepted that attention facilitates information processing (Gardener and Parkin, 1990), so if advertisers wish to communicate rational news and information – performance claims, price offers, website addresses and the like – and instil these into the consumer's memory, then their advertising has to achieve reasonably high levels of attention. If advertisers need to build a strong brand and achieve good communication, then their advertising needs to achieve both engagement and attention. Heath's (2007) study which is applied by using a cognitive emotive power test, shows that the emotional 'creative' content is a key concept that drives favourability towards brands. .

In Heath's work (2007, 2009) for example studies are based around distinctions between content based on their Cognitive Power™ or Emotive Power™. Cognitive Power™ is the measure of potency an advertising message has based on rational information; conversely Emotive Power™ is based on emotional information. A predictor of the kind of attention that is produced by advertising is determined by these two measures of power. Studies that manipulate the level of emotion in advertisements resulted in advertisements with high levels of emotional content correlating with lower levels of top-down attention at 99.9% (Heath and Feldwick 2007).

A Framework for Attention

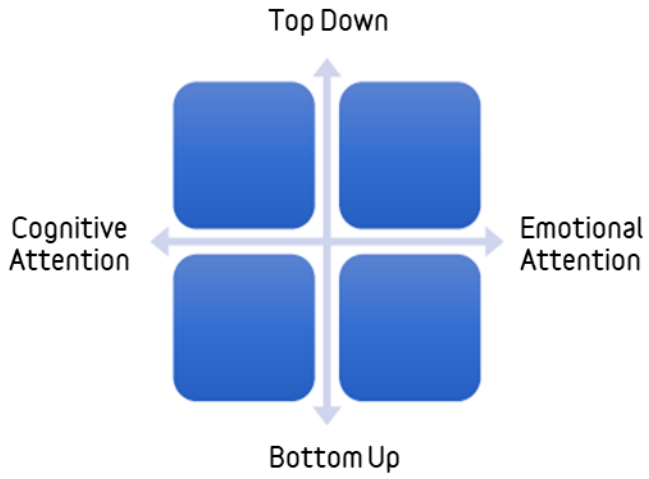
A review of existing theories had led us to conclude the following:

1) Too much emphasis is placed on what happens in the brain, however, **the contextual dimensions of attention** have not been sufficiently accounted for
2) Whilst research on information processing states emotional processing is low involvement, the importance of value-expressive goals and the kinds of behaviour and outcomes they drive are nothing if not complex and involved. We therefore identify that **that there is an emotional top down attention processing, which hasn't been considered explicitly in the literature**
3) Ultimately for attention metrics to achieve higher credibility they need to be linked to outcomes

Below we identify key variables and describe an Attention Framework that considers all of the above.

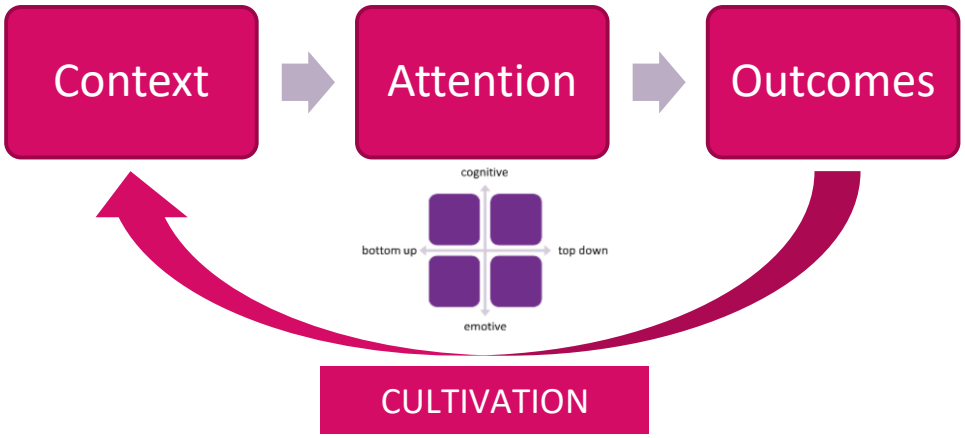
We propose a more comprehensive measure of attention that includes cognitive and emotive components and accounts for different types of processing in situations according to the type of attention aroused. This is based on the types of goals that are driving attention. If the goals of attention are utilitarian, they will arouse cognitive attention (information seeking mode). If goals are value expressive then they will arouse emotive attention (daydreaming mode) (see figure 4). Importantly, emotive attention is distinguished from the way the literature tends to regard emotional processing, which is usually considered to be low involvement. We believe emotive attention is equally as detailed in its processing and involvement as cognitive attention if not more so, given that it is highly related to and motivated by goals, in which the consumer is highly invested.

Figure 4: Integrated model of attention



Source: PCCC-Bournemouth University, 2018

Figure 5: Attention Framework



Source: PCCC-Bournemouth University, 2018

Bottom up: system 1- intuitive, automatic, effortless, associated, fast, unconscious, often occurs when multi-tasking, stimulus driven

Top Down: system 2- controlled, effortful, deductive, slow, self-aware, usually solo focused attention, goal driven

Emotion processing: feeling-based processes, aroused by value expressive goals

Cognitive processing: information is processed rationally, aroused by utilitarian goals

As illustrated high cognitive and high emotive attention will lead to top down (high involvement) processing (top right and bottom right quadrants), low cognitive and low emotive attention will lead to bottom up (lower involvement) processing (top left and bottom left quadrants).

Contexts of Attention

The context in which advertising is experienced will impact the nature of attention given to an ad/content. The context of attention relates to:

a. Advertising goals

Purpose of the advertisement (desired outcome, remind, inform, change attitude, build brand, etc).

b. Personal goals

Utilitarian or Value Expressive (and specific nature of those goals)

c. Media moment

How the media is being experienced (escapism, diversion, killing time)

d. Media brand/channel relationship

Consumers relationship with particular media brand (pleasure, purpose, trust, relevance, credibility, personal connection, emotion, control, personal choice, loyalty)

e. Advertising relationship

Consumers relationship with an advertisement (part of experience, relevance, distracting, annoying, etc).

Advertising Outcomes/Metrics

Emotional and Cognitive attention are better captured with metrics that are linked to advertising outcomes. The following are useful proxies for measuring Emotional and Cognitive attention.

Cognitive attention	Recall Attitudes Intention Time spent (intensity, duration) Information (pre-purchase, surveillance, knowledge, inspiration)
Emotive attention	Recognition Entertainment (enjoyable, exciting, entertaining, surprising) Personal identification (self-presentaiton, expression, personal reference, reality exploration, value reinforcement)

Conclusions

This paper has provided us with a useful framework for understanding attention to advertising. This framework is not only something that we can use to design further stages of research but also represents a handy planning framework to aid decision making.

In addition, this has also served as a useful reminder of some of the core strengths of magazines when it comes to attention. Magazines in print, in particular, are not reliant on interruptive attention. This puts them at an advantage compared to other advertising environments such as digital, TV and radio. This means magazines are less susceptible to advertising avoidance in the form of skipping. When you also consider the evidence that suggests print environments conform to 'top down' processing of information, this places printed magazines in a good position to deliver quality attention.

Given that message relevancy and congruency between message and environment have also been found to improve levels of attention, magazines, with their subject specific environments, offer a prime opportunity for improving attention to advertising. Magazines provide the opportunity to influence receptive audiences with a targeted message as well as integrate the message with the content environment, improving the level of attention given to advertising. In the next phase of 'Attention Please' we are keen to link these strengths in attention to improvements in effectiveness metrics.

Magazine brands are of course much broader than print and, whilst the theories of top down attention more readily apply to these environments, the evidence about goal driven information processing applies equally to some digital environments. This report provides some evidence about premium publishing environments and their ability to deliver quality attention from Lumen and Moat. However, this is still a relatively new area of research, and one we are keen to add to in our programme of research and long-term commitment to studying attention.

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