THE RELATIONSHIP BETWEEN ADVERTISEMENT CONTENT AND PACING ON EMOTIONAL RESPONSES AND MEMORY FOR TELEVISED POLITICAL ADVERTISEMENTS

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A thesis submitted in partial completion of the degree of Doctor of Philosophy of The Australian National University.



Statement of Originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I certify that where parts of this thesis have been published externally, that this work is acknowledged within the text, both in the Statement of Publication, and where figures, table, diagrams, result sets or images have been published, this is acknowledged within the text as appropriate.

I certify that my thesis is my original work, and authored by my hand. Any help that I have received in my research work and the preparation of thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature

Andrew Hughes

27-11-2014

Date:

Acknowledgments

A PhD thesis may have only one name on the cover, but as they say behind every cover page are a cast of thousands who helped that page be written.

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Abstract

Political advertising remains the most dominant method of political communication in the world as it is the most effective way of communicating the promise of exchange to the political market. Without a doubt the single most important, expensive and well used method of political advertising is televised political advertising. It is also an area of increasing public policy concern over the perceived impact that it is having on society's perceptions of the democratic process, institutions and stakeholders. This is especially so for negative advertising which may very well be creating a negative attitude in voters towards political offerings of exchanges, brands, institutions and stakeholders that may not be reflective of reality.

Yet little research has examined if this is true and little is known about whether or not voters respond emotionally to televised political advertising, and if this response influences their memory and arousal to the message. Even more broadly, how political advertising is influencing the response to the communication of political exchanges in the context of an offering of value and one of loss, and how this influences emotional response to brands, is still not yet fully understood.

This thesis will therefore examine what political promise of exchange when communicated using television advertising, either of value or loss, is best remembered by voters. This will help understand how political advertising is affecting voters' memory of political exchanges and attitude to brands.

It will use psychophysiological measures of skin conductance and heart rate to measure how voters respond to different types of political messages that vary on two important variables: message structure, which in this thesis is pace. Pace can influence the perceived information complexity and content of a message. The second variable is valence or if the message is negative or positive in content.

This will further knowledge and understanding about whether or not negative and positive advertising (that varies by pace) is affecting the emotional responses of voters to the point where they become more aroused and better remember political messages.

Statement of Publication

Work originating from this thesis has been published in the following articles and conference papers:

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- ---- (2003), "Defining Negative Political Advertising: Definition, Features and Tactics," Australian and New Zealand Marketing Academy: University of Adelaide, 163-171
- ---- (2004), "The Branding of Political Parties A Case Study Approach," Australia and New Zealand Marketing Academy Conference: Victoria University Press.
- ---- (2004), "How are Websites used by Political Parties in Political Marketing Campaigns," International Nonprofit and Social Marketing Conference: The Australian National University, 114-119.
- ---- (2004), "'The Power and the Passion: Will Celebrity Candidates become the norm in future Political Marketing Campaigns'," International Nonprofit and Social Marketing Conference: Australian National University, 64-69
- ---- (2007), "Personal Brands: An Exploratory Analysis of Personal Brands in Australian Political Marketing," Australia and New Zealand Marketing Academy Conference: University of Otago, Dunedin, 1114-1120

Hughes, Andrew and Stephen Dann (2005), "Qualitative Case Analysis of the TeamBeattie. com Website," in Australian and New Zealand Marketing Academy, University of Western Australia, 123-130.

- ---- (2005), "Using Celebrity Candidates in Political Marketing Campaigns," Australian and New Zealand Marketing Academy: University of Western Australia, 115-122.
- --- (2006), "Political Marketing and Stakeholders," Australia and New Zealand

Marketing Academy Conference, Queensland University of Technology, Brisbane, Queensland, 4-6.

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Statement of Thesis Course Work

The following subjects were undertaken as partial satisfaction of the requirements for the degree of Doctor of Philosophy of The Australian National University.

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- BUSN 8103 Special Topics in Commerce
- STAT8020 Multivariate Analysis
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CHAPTER 1 INTRODUCTION

Introduction

This chapter presents an overview of the present study. It describes the reasons for the motivation behind the study. It gives a brief overview of the status of political marketing and political advertising research, which then leads into research question development. Next, a summary of the methods used in the research is described, followed by any ethical considerations that were pertinent to this thesis. Finally, the scope and limitations of this work are described, followed by an outline of the thesis structure and the summary of the chapter.

Motivation for Studying Political Advertising

Political advertising has three unique characteristics that differentiate it from commercial marketing activity. First, political brands communicate exchanges of value and loss in the same campaign, which does not happen in commercial product marketing. This means that communication of exchanges will be in both positive (focusing on the promise of value) and the negative (focusing on the promise of loss) to the market. Similar strategies do occur in social marketing but these campaigns are usually built around singular brands that have long term objectives, whereas political marketing exchanges of both value and loss focus on the duality concept (party and candidate) of political offerings.

Second, the whole of a nation's population will be part of a political marketing exchange, but only some will willingly purchase the product (for example, vote for the government). Few, if any, other products have this level of impact on society. This means that, at every election, to effectively communicate a value of exchange to the market, political brands need to overcome existing attitudes towards the brand and advertisement that have been created around the brand in the previous term of government. These attitudes will differ not only due to the perception of what brands should do in government and what they should do in opposition, but also due to attitudes towards political brands in general and also involvement with the political process and political stakeholders.

Third, political advertising is still primarily focused on shorter time frames, such as election campaigns that can last anywhere from one year to one month in duration,

depending upon the political system, and where leader brands can be vastly different from election to election (Butler and Collins 1994; Needham 2005; O'Shaughnessy 2001; Strömback 2007). This is in contrast with commercial marketing where campaigns are continuous and last for as long as the product does, communicating only promises of value using positive messaging. As advertising is the primary method of communication and creation of exchange in political marketing other methods of integrated marketing communications, such as sales promotions and sponsorship, do not have the same degree of emphasis or use as in commercial marketing. These attribute, combined with attitudes towards the brand, leads to a need for political messages to create arousal towards their message and product in a shorter time frame than commercial marketing.

Emotional Impact

Political marketing research needs to, as Dann et.al. (2007) said, "reignite the fire" by using more modern methods of marketing research to uncover new research findings and opportunities to help explain more deeply and fully how consumers interact with politics as a product. Whilst most political advertising research to date has examined the more strategic use of the method, there has been only a small amount of work done on how consumers might be responding emotionally to political television advertising. Considering how important emotional response is in any model of advertising, understanding what makes a voter respond emotionally to an advertisement, or what structural or content aspect of a message arouses their levels of interest in a message, is important in understanding how political advertising can be effective.

Pyschophysiological Measurement in Political Advertising

Psychophysiological techniques are used to understand how a viewer is aroused emotionally by a stimulus, and have been applied political advertising by Bradley, Angelini and Lee (2007). However, as television advertisement comprises two elements (structure and content) any research in this area can only take an incremental approach, as the use of psychophysiological methods is restricted to only one or two variables at a time. Consequently, this incremental approach requires researchers to sequentially narrow the gaps of knowledge to areas or relationships that are impacting upon the effectiveness of political advertising. Knowing how consumers emotionally respond to the duality concept of political exchange that is currently offered by political brands is also important in understanding the effectiveness of not just political advertising but also political marketing.

Therefore, there are two aims for this study. Firstly, to investigate the duality of exchange in political marketing and which promise, either loss or value, has greater arousal and memory with voters and, therefore, which message is better to communicate to voters.

Secondly, this research will investigate the interaction between valence or content of a message, and structure, in this case pacing, on a viewer's arousal and memory levels of a political television advertisement. This is to understand what combination of these elements is the most effective at creating positive emotional arousal in a consumer and how this arousal influences the processing and memory of a political message.

Status of Political Marketing Research

This section will provide a brief overview of the status and relevance of research in the relevant areas of interest to this thesis: political marketing exchange, political communications and advertising, and media processing and psychophysiological theory.

Overview of Political Marketing

As political marketing is derived from broader marketing concepts and applications (Lock and Harris 1996; Kotler and Zaltman 1971), its definition is also based on that of marketing. Therefore, for the purposes of this research political marketing can be defined as:

A set of activities, processes or political institutions used by political organisations, candidates and individuals to create, communicate, deliver and exchange promises of value with voter-consumers, political market stakeholders and society at large.

(Hughes and Dann 2009, p244)

When a political candidate or party applies this concept to the political process, they must be in a position to adapt to and satisfy voters' needs (Mauser 1983; O'Cass 1996; Newman and Sheth 1987; Reid 1988). Prior research (Newman and Sheth 1987; Houston 1986) identified the need to apply the marketing concept to the political process in order to understand the values that voters will place on selective criteria that will generate an effective exchange between a consumer and a voter. Given political marketing has as its central foundation in exchange theory (Ormrod, Henneberg and O'Shaughnessy 2013), and exchange theory has undergone expansion and broadening with the advent of Service-Dominant Logic (SDL) of Vargo and Lusch (2004).

exchange theory in political marketing through recent work (see, for example, Ormrod, Henneberg and O'Shaughnessy 2013) has identified how unique exchange is in political marketing.

The nature of political marketing exchange occurs due to how exchange is developed and applied in the political market. Firstly, as with any exchange in marketing, there is the central or primary exchange between two actors where value is co-created, each actor exchanging a thing of value for another thing of value from the other actor (Lusch and Vargo 2012). However, this primary exchange then usually creates a secondary exchange between other stakeholders in the political market. For example, a policy being implemented impacts other stakeholders who were not part of the primary exchange, and are now recipients of the outcomes of that voter-party exchange. For these other stakeholders, this can create a unidirectional exchange of value or loss, which creates a delayed exchange relationship to be acted upon at the next election transaction.

The nature of exchange in political marketing raises the question: if political marketing is about creating and communicating value, then would a creation of a loss be less effective as message than one of value? When applying the definition of political marketing, creating or communicating a negative value exchange should be less effective, yet in politics, negative political advertising is used as the primary method of communication with target markets to influence voter behaviour. For any message to change behaviour it first needs to create an emotional response within a viewer, to arouse them and thereby cause them to undertake an action that changes their behaviour. This then leads to the question, do negative promises of value create greater arousal than positive ones and, therefore, which promise creates better recall of the message?

Political Marketing Communications and Political Advertising

Political advertising has two main objectives – to make the target market aware of the value offering of the organisation and to influence the behaviour of the consumer so that they develop a liking and preference for that brand which then becomes an intention to purchase.

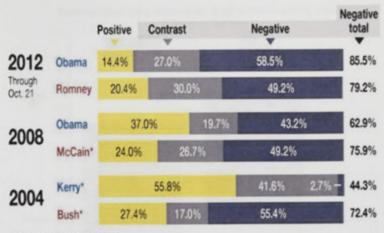
These broad objectives of advertising apply to Kaid's (2004) definition of political advertising as "a means through which parties and candidates present themselves to the electorate, mostly through the mass media". Kaid (2004) states that the defining characteristics of political advertising are control of the message and use of mass

communication channels to distribute the message, which is consistent with meeting the broad objectives of political advertising as explained prior.

Whilst the role, characteristics and definition of political advertising point to the use of positive messaging to achieve communication objectives this has not been the case in more recent times as seen in Figure 1.1, which shows the dominant use of negative advertising in US Presidential campaigns since 2004. Although nearly all political campaigns have used an element of negativity to attack the credibility of their opponents, it is only in recent times where this has started to accelerate in use to become the dominant method of communication in political campaigns (Ansolabehere and Iyengar 2010; Kaid 2012).

This is despite the contradiction on what makes marketing effective which is implicit in its definition and its application through the promise of exchange, a point noted by Ansolabehere and Iyengar (2010) who argue that positive messaging can stimulate people to vote and instil confidence in the democratic system of government. Despite these points, negative messaging is preferred for the perceived strategic effect it has by political organisations. These strategic effects of negative advertising can have a range of purposes. One might be to influence voter turnout by either turning voters off voting through increasing despondency in the political process and, therefore, encouraging not voting in the election, or by increasing voter turnout through creating a fear of a political candidate or party being elected (Ansolabehere and Iyengar 2010; Kaid 2012; Merritt 1984).

Figure 1.1: Political Advertising during US Presidential Campaigns Since 2004 by Valence



^{*} Includes coordinated party ads.

Sources: Wesleyan Media Project analysis of Kantar Media/CMAG presidential ad airings (2012); Wisconsin Advertising Project (2004 and 2008)

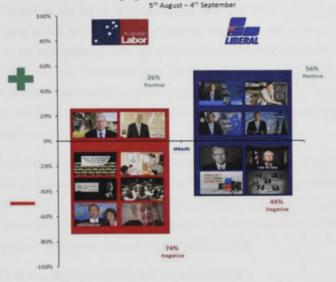
Source: Cronin 2012; Wesleyan Media Project 2012.

Another might be to increase the probability of influencing a desired action amongst the target market through a message of fear or anger (Ansolabehere and Iyengar 2010; Kaid 2012). More recent research from a political communications perspective by Fowler and Ridout (2013) on the 2012 US Presidential election states that the rise in negative advertising could be partly attributed to the perceived closeness of races by political organisations and the use of mainstream media to achieve communication objectives. It is this latter point that they argue has created a need to obtain publicity through making aggressive negative messages that get the attention of the media.

This is reinforced by their finding that the dominant emotion portrayed in negative messages in the 2012 US Presidential race was anger, with 74% of all messages screened having this emotion somewhere in the advertisement (Fowler and Ridout 2013). The closest positive emotion was enthusiasm at 31% (Fowler and Ridout 2013). In the Australian Federal election of 2013 (see Figure 1.2), the losing Australian Labor Party had used 75% negative messages, but the winning Liberal Party had used 70% of positive messages (ebuqity.com 2013), which might indicate that political parties are seeing the positive light at the end of the negative tunnel.

Figure 1.2: Advertising by Type 2013 Australian Federal Election

Positive Messaging Volume vs. Negative Messaging Volume



Source: Ebiquity.com 2013.

Yet, contrasted with commercial marketing from an advertising perspective there are very few reasons why a negative message should work or be more successful than a positive one at creating arousal. Very few commercial campaigns ever use negative messages to achieve communication objectives, with perhaps the most well-known being the *Energizer Duracell* commercials that used a pink rabbit to highlight the advantages of one brand over the other.

The reason is clear from most advertising literature: the best ways to influence a consumer is to make them like a message so that they pay more attention to it, then store the message in their memory and hopefully influence their behaviour through purchase intention or brand preference. This is seen from models, such as the Rossiter and Bellman (2005) model, to the Petty, Cacioppo and Schumann (1983) model of central and peripheral routes of persuasion – the best way to make a consumer like a message and pay attention to it is to use appeals that they will like to watch.

However, there is one final element to advertising that might explain the contrast in effects between positive and negative political advertising and commercial advertising – structural effects. Advertising comprises two main features: content or valence and structural effects. Whilst the content of the message, either positive or negative, can

influence liking and emotional response to a message, this can be either emphasised more or less by the use of structural effects. Structural effects are techniques such as cuts, edits, zooms or length. These effects can also play a role in liking and attitudes towards the advertisement, although what exact role structural effects have on political advertising has not been thoroughly investigated, but the research in commercial advertising is enough to suggest that they can have a significant role (Lang 2000). These effects will be discussed in more detail in the section below on psychophysiological measures and in Chapter 2.

This contrast between political and commercial advertising raises the question: which promise of exchange, that for value or that for loss, is the most memorable method to use and, therefore, have the greatest positive influence on consumers? This question is best answered through the use of psychophysiological methods which explain the effect of structural elements on memory and emotional response.

Media Processing and Psychophysiological Research

Media processing using psychophysiological research techniques started to emerge as a method to analyse advertising and other media in the early 1990s as the technology, knowledge and cost of using biometric measures became more accessible to researchers. Although the first studies into viewer reactions to different film content were conducted in the 1920s, the equipment was intrusive on participants, and knowledge of how the brain and heart influenced emotional responses to media was still developing (Potter and Bolls 2012). By the 1990s, these obstacles had been overcome and the first use of these methods were made to examine the effects of structure and valence on how consumers remembered, attended to and responded emotionally to advertising messages.

The use of these measures requires a scientific experimental approach which limits the examination of one or two variables at any one time. Consequently, research findings have been incremental, and the expansion of prior research into new contexts is a traditional approach in this research area. The advantages of using psychophysiological measures is the measurement of real-time responses, rather than after a viewing session when the respondent has limited ability to recall how they reacted to a message when it was viewed. The real-time response gives a view into how a consumer responded to messages as they were watched, which allows for analysis of the elements of those messages.

Psychophysiological research provides evidence towards the combinations of valence and structure that arouses a viewer to make a message memorable. Studies into pace (Lang, Bolls and Potter, 1999; Bolls, Muehling and Yoon 2003) have found that the faster a message is, the higher the arousal until the viewer's capacity for message processing is reached when there is a decrease in arousal as secondary tasks take precedence over the primary task of watching television. In turn, this can be influenced by content elements, such as information density, with more information requiring more processing capacity and therefore higher arousal levels, but also an increased probability of reaching a viewer's processing capacity (Lang et.al. 1999; Lang 2000). As every person has a dynamic capacity for message processing that is dependent upon several factors such as occupation or life cycle, this can happen quickly or in hours. Thus far, most studies (Bolls, Muehling and Yoon 2003; Lang, Bolls and Potter, 1999; Lang et.al. 1999, Lang 2000) have found that the higher the pace in a message, the higher the arousal levels in response to that message. As political messages want to increase arousal in a viewer it could be argued that the use of higher pace in a political message would be able to increase arousal to that message, but this is yet to be investigated in research in political advertising.

Studies (Lang, Newhagen and Reeves 1996; Newhagen and Reeves 1992) in the psychophysiological processing of media have found that negative images and scenes have higher recall than positive images and scenes. This is similar to the findings in political advertising that recall is higher for negative messages than positive messages. However, recall does not equate to effectiveness since message recall may not result in higher involvement with content.

However, to uncover if the message was memorable because its content and structure made a viewer angry or because the viewer liked the content and structure of the message, it is necessary to measure arousal levels to that message (Lang, Bolls and Potter 1999; Bolls, Muehling and Yoon 2003). As prior psychophysiological research findings reveal that a fast-paced message increases arousal, as does a negative message, this should mean that a fast-paced negative political message should have high levels of arousal and recall. However, this is not certain as there still remains some debate between the findings in psychophysiological research and political advertising research.

Ansolabehere and Iyengar (2010) note the greatest emotional response they measured in their studies was to positive political advertising, and Pinkleton, Um and Austin (2002) found that after viewing negative advertising participants were more negative about the political system and campaigns.

There is also the issue that information density (Reeves et.al. 1991) can affect message processing, arousal and memory of a message. The more complex or dense the information is in a message the more this uses up the limited capacity for message processing a viewer has (Reeves et.al. 1991; Fox, Park and Lang 2007). This has implications for political advertising as some messages contain a lot of information, such as on policies, for viewers to process that could be affecting their attention, arousal and memory for that message.

One other significant factor that this area of research has implications for in a political marketing sense is how do pre-existing low levels of positive attitudes towards political advertising and brands influence arousal and recall of messages. For example, if a viewer preferred one brand over another then it could be argued that this brand preference and familiarity should increase arousal to the message (Campbell and Keller 2003). Research into the relationship between pace and valence of political messages and how voters respond to these messages emotionally would not settle this argument conclusively, but would help significantly to do so and provide a guide for future researchers in the area.

Research Question Development

This thesis aims to contribute to the political advertising and psychophysiological research in the areas of whether a promise of value or loss in an exchange has a higher level of recall. Understanding this will help to know what value exchange is being better remembered by voters and, therefore, what political organisations need to do to communicate the primary exchange offering more effectively. This leads to the development of the first research question:

Research Question 1:

What promise of exchange has higher recall from voters: the promise of value or the promise of loss?

Secondly, research in political advertising is yet to investigate what makes a voter respond emotionally more to one type of political message than another. Whilst psychophysiological research supports the notion that negative images and scenes attract more attention resources due to the human's body "fight or flight" response, and

that pace increases arousal, this is contradictory to some findings in political advertising that show that negative messages do not increase arousal more than positive messages (Ansolabehere and Iyengar 2010; Lang 1991). Limited prior studies have considered the effect of structure and valence on arousal and memory to political messages by voters.

Given the key campaign objectives of political advertising is to communicate promises of exchange that will influence behaviour of a voter, this research will contribute to analysis of the types of messages that arouse emotional responses in a voters.

This then leads to the development of the second research question that this thesis will examine:

Research Question 2:

What combination of pacing and valence is the most effective to use in a political marketing campaign that can achieve recall and favourable emotional response from the market? Therefore, which type of message will influence the perception of the promise of exchange being offered to the market by the brand of their preference?

This research will also help researchers understand how party preference affects arousal to a message. Prior studies (Campbell and Keller 2003; Tellis 1988) in commercial advertising and branding have found that the higher the preference for a brand influences the more likely that attention is paid to a message, and the more likely that the message from the preferred brand will be evaluated positively. However, this is yet to be tested in political advertising which, as Lang (1991) noted, is unique to other forms of advertising. A series of hypotheses were created to test these central questions. These, and the results of the study, are outlined in Table 1.1.

Table 1.1: List of Hypotheses Developed for this Study

Hypothesis	Confirmed/Disconfirmed
Hypothesis 1: Negative political advertisements will be better recalled than positive political advertisements	Confirmed
Hypothesis 2: Political advertisements that are more arousing will have higher rates of recall	Disconfirmed
Hypothesis 3: There will be a significant interaction between valence (negative/positive) and pace (slow/medium/fast) such that fast negative advertisements will have a better recall than slow advertisements	Disconfirmed
Hypothesis 4: There will be a significant interaction between valence (negative/positive) and arousal such that negative advertisements will have higher arousal than positive advertisements	Disconfirmed
Hypothesis 5: There will be a significant interaction between pace (slow/medium/fast) and arousal such that slower advertisements will have lower arousal than faster ads.	Disconfirmed
Hypothesis 6: There will be a significant interaction between pace (slow/medium/fast) and between valence (negative/positive) that will influence arousal such that slower positive advertisement will have lower arousal than faster negative advertisements	Disconfirmed
Hypothesis 7: Party alignment, as measured by House of Representatives voting behaviour, will influence arousal to advertising such that messages from preferred brands will have higher rates of arousal	Disconfirmed

Hypothesis 1: Negative political advertisements will be better recalled than positive political advertisements

This hypothesis was based on prior findings from both political advertising (Lang 1991; Lau et.al. 1999; Merritt 1984; Pinkleton 1998) that found that negative advertising had higher rates of recall than other types of messages and psychophysiological research relating to negative images that showed the same effect (Newhagen and Reeves 1992; Lang, Newhagen and Reeves 1996).

The findings from this study were consistent with prior research findings.

Hypothesis 2: Political advertisements that are more arousing will have higher rates of recall

This hypothesis was examining the prior research findings (Lang, Bolls and Potter 1999; Lang, Dhillon and Dong 1994) that arousing messages have higher rates of recall. An arousing message was defined as one that aroused a viewer through use of negative or positive content or even structural features. For example, messages that create fear in viewers often rate highest on recall measures (Henthorne, Latour and Nataraajan 1993). In a practical sense, in the US Presidential election of 2012, 73% of all political messages used anger as an emotive stimulus to create arousal (Fowler and Ridout 2013).

The findings from this study do not support the hypothesis that political advertisements that are more arousing will have higher rates of recall.

Hypothesis 3: There will be a significant interaction between valence (negative/positive) and pace (slow/fast) such that fast negative advertisements will have a better recall than slow advertisements

This hypothesis was based on both findings from prior research in political advertising of negative advertising having higher recall rates (Lang 1991; Lau et.al. 1999; Merritt 1984; Pinkleton 1998) and psychophysiological research (Lang, Bolls and Potter 1999; Bolls, Muehling and Yoon 2003) that found that the faster a message is (pace is determined by the number of cuts in a message with a fast-paced message having at least 11) then the higher a viewer's arousal levels would be. This relationship had never been tested in political marketing before.

The findings from this study do not support this hypothesis.

Hypothesis 4: There will be a significant interaction between valence (negative/positive) and arousal such that negative advertisements will have higher arousal than positive advertisements

This finding was based on prior findings in political advertising (Lang 1991; Lau et.al. 1999; Merritt 1984; Pinkleton 1998) that negative advertising generates greater recall and attention than positive advertising and findings from psychophysiological research (Newhagen and Reeves 1992; Lang, Newhagen and Reeves 1996) that negative images get higher arousal than positive images.

The findings from this study do not support this hypothesis.

Hypothesis 5: There will be a significant interaction between pace (slow/medium/fast) and arousal such that slower advertisements will have lower arousal than faster advertisements

Prior research in psychophysiological research (Lang, Bolls and Potter 1999; Bolls, Muehling and Yoon 2003) found that the faster the pace of a message the higher the arousal to that message. This had not been tested in political advertising.

The findings from this study do not support this hypothesis.

Hypothesis 6: There will be a significant interaction between pace (slow/medium/fast) and between valence (negative/positive) that will influence arousal such that slower positive advertisements will have lower arousal than faster negative advertisements

This is based on prior research (Lang, Bolls and Potter 1999; Bolls, Muehling and Yoon 2003) which found that the faster the pace of a message the higher the arousal to that message, and findings from psychophysiological research that negative images and scenes (Newhagen and Reeves 1992; Lang, Newhagen and Reeves 1996) created higher arousal levels than other types of messages.

The findings from this study do not support this hypothesis.

Hypothesis 7: Party preference, as measured by House of Representatives preference, will influence arousal to advertising such that messages from preferred brands will have higher rates of arousal

This is based on prior research in advertising that found that brand preferences influence attention and recall to advertising, which would be reflected in higher arousal levels (Campbell and Keller 2003; Tellis 1988). Political advertising studies also found that viewing political advertisements increased information and knowledge of political brands by participants (Kaid, Fernandes and Painter 2011; Kaid et.al. 2007; Rothschild and Ray 1974) and that participants who had higher levels of enduring and situational

involvement with television news also had higher interest in negative advertising, and negative advertising had more likelihood of influencing their voting decision (Faber, Tims and Schmitt 1993). Faber and Storey (1984) also found that recall of information from a political advertisement was highest when the participant preferred that brand and that recall of any information was highly relative to attitude variables than any other types of variables including television exposure.

The findings from this study do not support this hypothesis.

Findings for the research questions are presented in Chapter 5, and individual results for the hypothesis are outlined in Chapter 4 and discussed in Chapter 5.

Summary of Method

The thesis applies both qualitative and quantitative methodological approaches. The qualitative method used in this study was open ended questions in the post-test survey. For the main study, the open ended questions used enabled the post-test measurement of memory based on unaided/aided recall methods that were consistent with prior studies in advertising, political advertising and psychophysiological research (Bolls, Muehling and Yoon 2003; Lang 2000; Kaid 2012; Merritt 1984; Potter and Bolls 2012). The answers would then be analysed using the Linguistic Inquirer and Word Count (LIWC) software program to ascertain which promise of value had higher recall.

The quantitative methods used in this research were surveys and psychophysiological research methods. In the pilot test study, the self-report measures of the Geneva Emotion Wheel (GEW) (Scherer 2005) and the Self-Assessment Manikin (Lang 1985) were used to measure primary and secondary emotions of participants. Self-report measures using 9 item scales were also used to measure pace and valence of messages.

As arousal to message content and structure needed to be measured in real time in the main study, psychophysiological measures of skin conductance and heart rate were used. These measures could then be matched against the stimulus to see what relationship there was between each. Skin conductance is measurement of the electro dermal activity of the body through changes in the skin that is produced by the sympathetic branch of the autonomous nervous system due to exposure to a stimulus (Potter and Bolls 2012).

It can measure changes in the tonic, or baseline response, and also the phasic, or temporary response, of the brain to stimulus through changes in electro dermal activity in the skin. As skin conductance only originates from one branch of the autonomous nervous system, unlike heart rate which can be due to changes in both branches, this makes it the preferred method to use when measuring arousal to stimulus (Figner and Murphy 2010). Heart rate is used as a confirmatory method, as changes in heart rate can be due to changes in both branches of the autonomous nervous system. This makes it harder to ascertain if the stimulus was responsible for the changes unless Heart Rate Variability (HRV) equipment and resources are available, which they weren't in this research.

There were four main instruments used to analyse data for this research. These were the use of the Biopac MP150 machine with AcqKnowledge software that was used to collect and analyse the biometric data from the main study. The Qualtrics survey website was used for data collection and some analysis of the post-test survey. The Linguistic Inquiry and Word Count (LIWC) software program was used to count the number of words as part of the unaided and aided recall memory measures. Data analysis using different statistical methods was carried out using SPSS and Excel software programs. Minor use was made of Windows Media software to take screen shots of TV advertisements for use in the cued recall part of the study, and to edit advertisements to ensure that all were of the same quality, length and format.

Contributions to Knowledge

This research aimed to answer two important questions in political advertising. Firstly, what promise of exchange, either value or loss, which is communicated by political advertisers has higher recall.

Secondly, this research aimed to answer what combination of structure and pacing is the most effective to use that can achieve higher rates of recall and favourable emotional response from the market and, therefore, which type of message will positively influence their perception of the promise of exchange being offered to them by the brand of their preference.

The main areas that findings from this thesis can contribute to existing knowledge are:

- Political marketing better understanding of how to communicate promises of exchange, and what exchange type is better remembered and arouses voters more.
- Political exchange and political markets how political exchange is perceived by voters, effective methods of communicating exchange using television advertising, and how the duality concept of political exchange is influencing voters arousal towards political advertising and brands.
- Political advertising how different content and pacing types of political advertising is affecting arousal of voters, memory and recall of different content and pacing types of political advertising, perception of different content types of political advertising and how this is affecting the communicating of political exchanges.
- Advertising arousal to different valence types of advertising, how pace can influence arousal, recall of different valence types of advertising, advertising in a political advertising context.
- Psychophysiological research arousal to different valance types in a political advertising context, arousal to different types of pace in a political marketing context.

Findings

This research found that promises of loss communicated through negative advertising have higher recall from voters. This is consistent with findings from earlier research that found higher rates of recall for negative advertising than positive advertising. However, this research also found that recall does not equate to effectiveness as arousal rates to negative and positive advertising were similar, suggesting that recall of negative advertising might be high due to the negative emotions this raised in participants. From a political advertising perspective the implications from this are that recall measures need to be used in context of other measures of advertising effectiveness as being able to recall a message does not mean that the message is liked.

The findings also show a lack of higher levels of arousal towards preferred party messages by voters. This indicates that party preference does not influence arousal towards advertisements from preferred brands. This is in contradiction to existing research findings in commercial marketing, and could be due to pre-existing attitudes towards political advertising and brands that mean that when a viewer sees a political

advertisement they do not want to attend or watch that message. It could also be due to information density in a message, with more dense messages making a viewer work harder through a message, something that they are less willing to do when the message is from a product category with which they have little involvement.

Another finding of this research is on the use of structural elements in political advertising. Prior psychophysiological research had found that as pace increased, so too did arousal to a point in time where a viewer's message processing capacity was reached. This research found that this did not happen. This is likely to have been due to the fact that pre-existing attitudes towards political advertising, especially negative advertising, was either negative or at very low positive levels, which might have negated the effect of pace on arousal. This is also a significant finding for researchers in psychophysiological media processing as it establishes a condition under which a structural feature is not as effective as previously thought.

Ethical Considerations

All research reported in this thesis received ethical clearances from the relevant ethical committees and authorities at both the Australian National University and Murdoch University. These are detailed below in Table 1.2. The full ethical approvals can be found in the appendices and contain copies of all consent forms and information sheets used in this research.

Table 1.2: Ethics Approval Protocols

Ethics Approval Number	Ethics Title	Appendix
ANU 2008/574	Attention to Elements in Television Advertising	G,H
ANU 2012/459; Murdoch 2012/206	Emotions in Television Advertising	A-C

It should be noted that there was an adverse finding reported after the study when the heart rate results were being analysed at the Interactive Television Research Institute laboratories. The adverse finding was due to a participant in the experiment being identified with a medical condition as a result of their heart rate being measured by the research equipment. This event was not related to the nature of the experiment, and as

such, does not impact on the experiment. However, all relevant authorities and committees were notified of this incident and gave approval to the methods then used to contact this participant. All data relating to this participant, in accordance with ethical practices and guidelines, was removed from the study and transferred to the Ethical Committee at Murdoch University to pass onto the participant at a later date or to be destroyed, whichever the participant preferred. This may be a rare occasion where political advertising was life altering, if not life saving.

Scope and Limitations

Scope

The scope of this research was limited to examining political advertising from the context of the overall valence and pace of the message, and the relationship between these variables and the promise of exchange (value/loss), arousal and memory. It was based on the findings of prior research in relevant areas and used research methods consistent with prior work in these relevant areas. This research did not set out to provide definitive answers to what the perfect political message is, only to answer the research questions posed in relation to the variable studied. It also could not examine all of the variables that constitute television advertising. To do so would be outside the scope of any study and requiring resources to great in cost, time and expertise. It also did not seek to measure attitudes to political advertising and contrast this against different types of political messages, although further studies may seek to do so.

Limitations

The research itself was conducted in a laboratory environment, albeit one as close as possible to a typical suburban home environment in which a participant would watch television. This also limited the scope to only individuals, and not to group situations, such as spouses, as this type of study would have required resources beyond the scope of this research. The research for the main study was also only able to be undertaken in Perth, Western Australia due to access to the Interactive Television Research Laboratory. Whilst the sample was reflective of the voting population of the Perth metropolitan area, it may not be reflective of the entire Australian voting population or the voting population of other democracies due to vagaries in voting age and electoral systems. This also means that the research was done in an Australian context, even

though the electoral system is not considered to be an important factor in influencing any of the results in this work.

The limitations of this research were that only one aspect of structure was examined, pace, when other elements could have been influential on the arousal and memory of viewers. Information density and pre-existing attitudes towards political advertising and political brands were also not measured before the study as these were not the aims of this research. A small number of political advertisements were used as this made it possible to replicate as close as possible the actual conditions under which a voter might view these advertisements in the real world, rather than a laboratory setting, but only this small number was possible to use due to the need to have the correct variables for the study. Two measures of emotional response were used, heart rate and Electro Dermal Activity (EDA) which measured primary emotional response to the messages in real time, whereas type 2 or cognitive emotions can have just as an important influence in how arousing respondents find messages, but these are far harder to measure in real time and in a laboratory setting without interfering with arousal and memory measures.

Thesis Structure

The thesis consists of five chapters, as outlined in Table 1.3. Chapter 1 provides an introduction and overview to the research. Chapter 2 will review the literature and establish the central research questions and the hypotheses. Chapter 3 will present the methodology used to explore the research questions posed in Chapter 2 and discuss the results of a pilot study conducted before the main study. Chapters 4 will present the results of the psychophysiological data collection. Chapter 5 will present the findings for the research, including theoretical conclusions, limitations and further research.

Table 1.3: Summary of Thesis Structure by Chapter

Chapter Heading
Introduction
Literature Review
Method
Results
Discussion and Conclusions

Summary

This chapter introduced the motivation behind undertaking this research. It discussed a brief overview of the status of political marketing research and political marketing exchange theory. It also gave an overview of the relevant areas of political marketing communications and political advertising, and media processing and psychophysiological research. Next, it outlined the development of the research questions and the hypotheses developed for this research. A summary of the research methods, measurement and instruments was also discussed, followed by the ethical considerations of conducting this research. Finally the scope and limitations of this research were outlined, along with the thesis structure by chapter.

CHAPTER 2 LITERATURE

Introduction

Chapter 2 introduces the literature with regard to the domain of political marketing, advertising and psychophysiological theory. This chapter emphasises the history and development of political marketing as a research field, highlights challenges within the discipline that have emerged from adapting commercial marketing theory, and outlines the need for specific theory development and testing in the areas of political marketing communication that contribute to the creation of the thesis's research topic.

After the discussion on political marketing, the chapter will examine the domain of advertising with an emphasis on emotional processing of media from the communications perspective. This is followed by an outline of the role of political advertising in political marketing including the different types of political advertising as classified by emotional media processing perspective. Finally, the chapter will end with an analysis on the relationship between memory and advertising with regards to emotional media processing.

Political Marketing History

Political marketing emerged from earlier work on campaign studies and activities. The term was first used by US political scientist Stanley Kelley in 1956 (Wring 1997). Selling of candidates, parties and organisations had first started to occur in the 1800s (Boller 2004). The first research to consider the selling of politics was in the 1960s when campaign selling and the selling of the President of the United States of America was examined (Shama 1975). The seminal paper of Kotler and Levy (1969) emphasised marketing research in the area of political marketing as part of their expanded domain. Since that time, research has grown in this area as the campaigns themselves start to reach new levels of political marketing methods, strategies and expense. Whilst research diversified across the full spectrum of marketing theory, has been a marked decrease in research in advertising research in recent years, even when this area constitutes the majority of expense for any political party.

Defining Political Marketing: The Historical Perspective

As with many sub-disciplinary areas of marketing, there are no singular definitions of political marketing accepted across the domain, and many authors differ over conceptual boundaries of the area both in theory and in practice (Dan 2010). For the

purpose of this thesis, a definition of political marketing which adapts the contemporary American Marketing Association (2007) definition of marketing is proposed to allow for a consistent application of political marketing thought within the research. Definitions of marketing are torn between being a descriptor of current practice, and an aspirant goal for future best practice (Hunt 2007). The purpose for creating a new definition of political marketing for this thesis is to provide both context and framework for the subsequent analysis of political campaign messages, and to that end, it must reflect the value of the message platform as a common means to communicate the intangible political product to voters. Redefining any disciplinary term is fraught with challenges from the perspective of producing an academically robust concept which is also sufficiently flexible to proscribe and describe practical implementation issues. For the purpose of the thesis, the definition will err on the side of academic robustness, and acknowledge a limitation that time prevents the field trial of the definition as a practical political tool.

Further, any new definition must also compete with the existing definitions in the market, and present a case for its existence. Whilst this definition is contextual initially to this thesis, it is hoped that it would provide wider value to the academic community of political marketing scholars. In addition, although political marketing is considerably less prolific than social marketing when it comes to definitions (Dann 2010), the subdiscipline has demonstrated a capacity to develop a broad range of different conceptual frameworks over time. For the purpose of this thesis, nine political marketing definitions span a period from 1996 to 2013 have been identified, and outlined in Table 2.1.

Table 2.1: Existing Definitions of Political Marketing

Author	Definition
Lock and Harris (1996)	The study of the processes of exchanges between political entities and their environment and among themselves, with particular reference to the positioning of those entities and their communications.
O'Cass (1996)	The analysis, planning, implementation and control of political and electoral programs designed to create, build and maintain beneficial exchange relationships between a party and voters for the purpose

	of achieving the political marketers' objectives.
Wring (1997)	The party or candidate's use of opinion research and environmental analysis to produce and promote a competitive offering which will help realise organisational aims and satisfy groups of electors in exchange for their votes.
Henneberg (1996)	Seeking to establish, maintain and enhance long-term votes relationships at a profit for society and political parties, so that the objectives of the individual political actors and organisations involved are met. This is done by mutual exchange and fulfilment of promises.
Newman (1999)	Political marketing is the application of marketing principles and procedures in political campaigns by various individuals and organisations. The procedures involved include the analysis, development, execution, and management of strategic campaigns by candidates, political parties, governments, lobbyists and interest groups that seek to drive public opinion, advance their own ideologies, win elections, and pass legislation and referenda in response to the needs and wants of selected people and groups in society.
Lees- Marshment(2001)	Political marketing is about political organisations (such as political parties, parliaments and government departments) adapting techniques (such as market research and product design) and concepts (such as the desire to satisfy voter demands) originally used in the business world to help them achieve their goals (such as win elections or pass legislation).
Lees-Marshment (2004)	The use of marketing by political organisations.
Hughes and Dann (2009)	A set of activities, processes or political institutions used by political organisations, candidates and individuals to create communicate, deliver and exchange promises of value with vote consumers, political party stakeholders and society at large.

Ormrod,	Political marketing is a perspective from which to understand
Henneberg and	phenomena in the political sphere, and an approach that seeks to
O'Shaughnessy (2013)	facilitate political exchanges of value through interactions in the
	electoral, parliamentary and governmental markets to manage relationships with stakeholders.

Whilst there is no commonly accepted definition of political marketing, nearly all have some relationship with the process aspect of the AMA definition of marketing. This definition as established in 2007 by the AMA is:

"Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large".

The selection of these definitions represents the three critical eras in the development of the American Marketing Association (AMA) definition of commercial marketing which incorporates the AMA's (1985) definition, the changes brought about by the AMA (2004) definition, and the ongoing reign of the current AMA (2007) definition. The definition to be presented in this chapter has been developed specifically to adapt the AMA's (2007) definition for political marketing purposes.

It is a customised definition, purpose built and designed to be applicable where the AMA (2007) definition is the dominant understanding of commercial marketing. Again, although this presents as a limitation for the thesis when the AMA engages in future definition changes, it is presumed that this work may be able to guide others in the creation of their own subsequent adaptations of future American Marketing Association definitions.

The AMA (2007) definition of marketing was selected as the core bedrock definition for adaptation for two reasons. First, the change in definition provided an opportunity to explore new conceptual ground, combined with the thesis's need for a definitional framework that supported the analysis and consumption of advertising content as a consumer outcome of engagement in the political process. Second, a search of the academic journals demonstrates the relative dominance of the AMA's definitions (1937, 1985, 2004) on commercial and non-commercial marketing theory. Consequently, the thesis adopts the AMA definition as the dominant contemporary framework that

underpins the 'marketing' side of the Anglo-European, Asia-Pacific and American political marketing literature.

Establishing Broader Parameters for Political Marketing with AMA (2007)

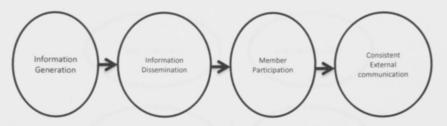
Of the current definitions of political marketing only two have been published since the change in the American Marketing Association definition of marketing in 2007, and only one of these, the Hughes and Dann (2009) definition, actually considers exchange as part of the construct of political marketing. The other, the Ormrod, Henneberg and O'Shaughnessy (2013) definition, uses a political science context for its construct and understanding of exchange.

This is important as the development of a new definition of commercial marketing represents an opportunity to expand the political marketing portfolio to incorporate the recent developments in the marketing parent discipline (Lock and Harris 1996; Henneberg 2004). The following section examines the AMA (2007) definition in four component categories: 'Activity, set of institutions and processes'; 'Creating, communicating delivering and exchanging'; 'Offerings that have value', and 'Customers, clients, partners and society at large'. These four components represent the areas of greatest impact and value for political marketing, and their conversion from commercial orientation into a political framework are discussed below.

Political marketing as a set of processes is directly supported by Clemente (1992), O'Cass (1996), Lock and Harris (1996), Newman (1999) and Lees-Marshment (2001). Overall, the majority of existing political marketing definitions either implicitly or explicitly recognise marketing as a set of processes (Wring 1995, 1997; O'Shaughnessy 2001; Butler and Collins 1996; Baines, Harris and Lewis 2002; O'Cass 2001b; Baines et al. 2003; Egan 2005).

Ormrod (2006) and Ormrod et al. (2007) outline an eight construct political market orientation model that recognises the institutions, processes and activities of marketing. Four of the constructs relate to behaviour, the other four relate to attitude factors. The behavioural constructs are outlined in Figure 2.1.

Figure 2.1: Ormrod's (2006) Behavioural Constructs in the Political Marketing
Orientation Framework

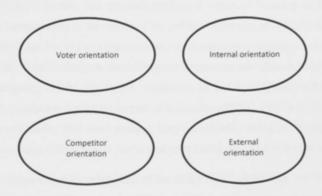


Source: Ormrod (2006)

The behaviour constructs relate to the physical actions of the actors that are observed, seen and felt by others (Peter, Olsen and Grunert 1999 in Ormrod 2006). Ormrod's (2006) behavioural constructs are based around those developed by Kohli and Jaworski (1990). The behavioural constructs are consecutive in a flow process. This enables the model to be applied to individual stakeholder markets and maximise the efficiency of the party in allocating resources to each stakeholder group to achieve party-stakeholder objectives. This also allows the model to be used in different electoral systems and different cultures.

The attitude constructs relate to the political orientation of party members towards different stakeholder groups in society, taking into consideration the internal culture of the party in determining attitudes towards the different stakeholder groups. This internal orientation uses attitudes as a way of quantifying the orientation and allowing its application in different electoral systems and party structures.

Figure 2.2 Ormrod's (2006) Attitude Constructs in the Political Marketing
Orientation Framework



Source: Ormrod (2006)

Together, all of the constructs provide a method of being able to ascertain the political market orientation of a political party and its attitudes towards stakeholder groups external to it. The Political Marketing Orientation framework is different to a political market orientation in that it is based on seeing marketing as a function that can be used by a political organisation and one in which the political organisation orients itself around various stakeholder groups in the market (Ormrod 2006).

These models in conjunction with the existing political marketing definitions of Clemente (1992), O'Cass (1996), Lock and Harris (1996), Newman (1999) and Lees-Marshment (2001) support the existing use of an institutional, functional and procedural view of marketing within the political framework. That is very much in line with the definition of marketing outlined by the AMA in 2007, and based on the exchange concept underlying all marketing theory.

For the purpose of this chapter, the creation, communication, delivery and exchange elements of AMA (2007) are identified as the consumer believes they will gain from the transaction (hope, optimism, belief in ideology) being traded for benefit (vote, loyalty, and donations) (Baines, Harris and Lewis 2002, O'Cass 2001; Scammell 1995; O'Shaughnessy 2001). Even applying the new service-dominant paradigm, the exchange between the actors would be based on value that each would recognise as

existing in the other and in the experience of ownership of what the other actor gives them. For that to happen, there still needs to be processes followed, institutions used and actions undertaken.

For this, the thesis adopts the approach of Lock and Harris (1996). Whilst predating the AMA (2007) by a decade, this approach outlines a means of focusing on the voter-consumer's interpretation of the whole of the political campaign as the core of product creation, which can be tied to value creation, communication, delivery, and exchange paradigm. This is particularly so considering the importance now placed on presidential style campaigning around the world, regardless of political system, whereby the consumer is purchasing the leader as part of a broader offering. That is to say, even if the voter is purchasing their local member, they are probably doing so usually because of the product being offered by the leader and party brand that candidate represents.

Across the discussion of the adaptation of the AMA (2007) definition, the chapter has emphasised procedural elements of political marketing such as voter-orientation rather than the content of political marketing. Consequently, the definition to be presented is intended to be transferable, directly or by adaptation, into the specific cultural, economic and political context of different elections and electoral systems (Baines, Scheucher and Plasser 2001). Further, the adaptation of the definition is following the 'marketing-is-different' approach that argues that the applicability of marketing theory and practice in politics is contingent on its adaptation to the political environment (Lock and Harris 1996; Egan, 1999; Lees-Marshment 2001a; O'Cass 2001; O'Cass and Julian 2002; Chen and Chen 2003; Needham 2005). Based on the prior discussions of the applicability of component elements of the AMA (2007) definition, this thesis defines political marketing as

a set of activities, processes or political institutions used by political parties, candidates and individuals to create, communicate, deliver and exchange promises of value between voter-consumers, political party stakeholders and society at large.

The new definition of political marketing groups the recipients of political marketing practice into the clusters of marketers (political parties, candidates and individuals) voter-consumers (customer/client), political party stakeholders (partners/clients) and the society at large. The definition encompasses political marketing theory, practice and tradition with the contemporary AMA (2007) definition of marketing as a guiding

conceptual framework for the thesis. This definition will be used within the thesis as a consistent framework to discuss the application of integrated marketing communications theory when analysing how consumers respond to different styles of political communications messages, where those messages can be seen as the communication and delivery of the promise of value between political parties and the voter.

Political Science versus Political Marketing

Political science takes a far different, usually negative view of political marketing. According to the American Political Science Association (2014), political science is defined as:

"Political science is the study of governments, public policies and political processes, systems, and political behavior. Political science subfields include political theory, political philosophy, political ideology, political economy, policy studies and analysis, comparative politics, international relations, and a host of related fields. Political scientists use both humanistic and scientific perspectives and tools and a variety of methodological approaches to examine the process, systems, and political dynamics of all countries and regions of the world."

O'Shaughnessy (2001) notes how some in political science treat political marketing "with condescension", describing how one political science paper by Bowler and Farrell (1992) stated how political marketing could not offer any theoretical insight into politics. Criticisms of political marketing by political scientists have been long recognised by even the earliest of political marketing researchers. Kotler (1972) touched on the differences between political science and political marketing, but noted: "An important means of achieving progress in a science is to try to increase the generality of its concept" (at 48). In the context of political marketing, the study of political power and political institutions can be advanced through both political science and political marketing.

Henneberg (2004) and Harris and Lock (2010) address the criticism that political marketing does not use the latest in political science or marketing research techniques. Whilst this is a criticism that can be applied to prior studies, political marketing is increasingly using more sophisticated research techniques, in both practice and in

research, such as the eye tracking study on negative political advertising (Bradley, Angelini and Lee 2007). This thesis will address this criticism of political marketing through the use of using scientific research methods, such as the psychophysiological techniques outline in the Methodology chapter. This criticism has also led to authors, such as Dann et.al. (2007), calling for the need to use more scientific methods in political marketing research, and by Lang (1991) in political communication. More recently, as research equipment and laboratories have become more accessible to communication researchers studies have used scientific methodologies to study political marketing phenomena, such as Bradley, Angelini and Lee's (2007) study into the psychophysiological and memory effects of negative political advertising and Gruszczynski et. al's (2013) study into the relationship between negative and positive imagery and political participation. These papers are providing new scientific insights into how the voter consumer is interacting with politics and political marketing that are providing the pathways for future research directions and studies.

Political science has described political marketing communications as a "wrapper of deceit" on politics (Crot 2006). Dean and Croft (2001) outline three specific challenges to political marketing communications: (1) political communications has been accused of causing people to become bored or apathetic towards politics; (2) being just another form of propaganda, and (3) creating excessive spending in politics. If anything, Dean and Croft (2001) were perhaps merely outlining the general criticisms of political marketing communications. Whilst Dean and Croft (2001) note the concern between political disengagement and advertising, there has been only a small amount of research to date on how political communications affects people emotionally. There is a need for further studies in the area using scientific research methods, such as psychophysiological measures, which will contribute to the debate in this area and develop further knowledge of voter consumer behaviour in a simulated real world environment. This thesis will address, in part, emotional responses to political advertising. This will contribute to the political science debate on the influence of advertising and engagement.

Advertising, in particular the role of emotion, is well recognised as being critical in influencing a consumer's affective responses that then make them choose one behaviour to adopt (Rossiter and Bellman 2005). Whilst political scientists may still debate the role of marketing in politics, marketing researchers perceive it to have an appropriate and acceptable role in the electoral process (O'Cass 2001). The thesis acknowledges

concerns, which exist in political science, regarding the use of emotional engagement can be addressed in part by this work. However, as this work is written from a marketing perspective, it will not resolve political science concerns over the legitimacy, efficacy or ethicality of using marketing in politics. Consequently, this chapter draws on the marketing discipline's existing acceptance of political marketing (O'Cass 2001), marketing's ongoing acceptance of its capacity to be applied into the political, social and non-profit arena (Kotler and Levy 1969; Lock and Harris 1996; Dann et al. 2007) and the subsequence recognition of political marketing in the AMA (2007) definition (Keefe 2008).

Context of Political Marketing

Political marketing is an older technique attempting to masquerade as a young discipline throughout much of the recent literature. Baines, Harris and Lewis (2002: 6) declared academic political marketing to be "new and embryonic" despite citing a political marketing definition from Sharma (1975), and a discussion of the application of the marketing mix to politics from O'Leary and Iredale (1976). Lock and Harris (1996) citing Wring (1994) notes that the "explicit use of techniques in politics which we would now describe as marketing" arose in the 1920s, and Wring (1997) raises Kelley's (1956) use of the term "political marketing". O'Cass and Julian (2002) cite Shama's (1973) suggestion that political consumer behaviour is the most "powerful test" of political marketing.

Long historical track records of political marketing are present in Bechtold and Grimiaux's (2006) case study of French political campaigning which cites the 1965 election and French author Lindon's (1986) *Marketing Politique* as examples of the longevity of the practice in French political marketing. Strömbäck (2007) discusses the historical context of political marketing, and notes the widespread use of the technique over the previous decades. Even recent criticism of political marketing, such as Savigny's (2007) work addressing the misuse of political marketing to depoliticise the political process remarks that political marketing is "nothing new".

Academically, political marketing is an established discipline with its own journal, the Journal of Political Marketing, conferences, such as the International Political Marketing Conference, trade press, such as Campaigns and Election, and academically ongoing support from mainstream marketing journals, including the European Journal of Marketing, Journal of Public Policy and Marketing, Marketing Theory and Journal of Public Affairs to name but a few. Recent research publications, such as Global Political Marketing (Lees-Marshment 2011), Political Marketing: Strategic Campaign Culture (Gouliamos, Theocharous and Newman 2013), Ormrod, Henneberg and O'Shaughnessy's (2013) Political Marketing: Theory and Concepts and, of course, the seminal Handbook of Political Marketing (Newman 1999), all show the increasing maturity of the discipline within marketing.

The ultimate benchmark of all marketing conceptual development is real world application. For this, Newman's (1999) treatise on how the marketing of Bill Clinton in the 1992 and 1996 US Presidential races was instrumental to the ultimate success of those campaigns, demonstrating the real world application of this theory in practice. These campaigns demonstrated that the emphasis had changed from a party concept to a broader party and candidate brand concept, a change that had led to the increased use of marketing technologies and tactics in campaigns. Newman and Perloff (2004) later wrote that marketing of leaders was a more successful strategy as party loyalty was declining since consumers wanted greater personalised engagement with politics, which was possible through leader-centric political offers. The use of leaders as key signifiers of brand positioning has been reinforced by recent research by Baines et al. (2013). They found that measurement of communication effectiveness of political campaigns needed to be improved so that it measured actual and not just intended positioning as this would help understand how communications were actually positioning a brand, not just what it intended to do. This identification of difference between intended positioning and actual positioning is one objective this thesis will seek to achieve.

Post-Newman (2004), Needham (2005) compared the marketing of Tony Blair in 1997 to the campaign of Bill Clinton in 1992 and stated that Blair had been marketed more as the product than the party brand itself. Nelson (2007) notes the influence of marketing in Thailand's political sphere where the Deputy Prime Minister was also a qualified marketer, whereas Patti, Luck and Chapman's (2003) note that the then incumbent Australian Prime Minister John Howard made specific mention of "brand identification" as a core campaign technique in political marketing practice in 2000.

Role of Political Marketing in Election Campaigns

Political marketing has an established track record in practice that stretches well beyond some of the 'established' contemporary commercial marketing practices of database marketing, television advertising and e-marketing. To this end, this research supports O'Cass's (2001) position that marketing has accepted a role in the political process, and, as an active sub-discipline of marketing, has been an influencing factors in the revision of the AMA marketing definition.

Contemporary political marketing campaigns are resource intensive operations that cost hundreds of millions of dollars (Wesleyan Media Project 2012) and have long term lasting impacts on society (O'Shaughnessy and Baines 2009; Hughes and Dann 2009). Emergent theory in commercial marketing has also been adapted into the political marketing process. Thomson's (2006) work on human branding mentions the applicability of this theory in politics, and Smith and French (2009) discuss how political brands transfer into a consumer's memory and are one of the brands that will remain in a consumer's memory across a lifetime.

Political parties are recognising the importance of their brands in influencing consumer behaviour and preferences, especially the leader brand, as the leader brand is increasingly suited to the US led Presidential style method of campaigning becoming prevalent in Western electoral systems (O'Cass 2001). Although bicameral systems, such as Australia, New Zealand and Great Britain, are not reliant on direct election of leaders, consumers recognise the political marketing process of the leader brand as a brand-proxy for their political choice (Davies and Mian 2010).

Political advertising is the most widely used aspect of marketing theory across all political systems as it is viewed as the most effective way of making voters aware of the promise of value being offered by the political organisation and their candidates. It can also be applied in reverse to communicate a promise of loss to voters if they decide to vote for other political organisations or candidates through the use of negative advertising. The communication of two exchanges, one of value and one of loss, makes political marketing unique compared to most other types of marketing where only a promise of value is communicated. Also unlike most other forms of marketing, political marketing campaigns are short-term with objectives targeted to achieving a desired result in a specific election with limited use of advertising to communicate offerings of value once that election is over.

Political Marketing Exchange

The concept and process of exchange is central to all definitions of marketing. Political marketing exchange is a recognised element of the practical political marketing process of campaign volunteering, voting, campaign donations and active partisan support for an issue or organisation (Lock and Harris 1996; Newman and Perloff 2004; O'Cass 1996; Stone and Rosen 2006). Exchange is a central platform of the political marketing process as the voter commits to their vote in return for the enactment of promises from political candidates pending a wide range of mitigating circumstances. The AMA (2007) definition raises the notion of business to business-style marketing as a potential factor in political marketing though through the use of political communications for agenda setting as an offering of value for media organisations (Dermody and Scullion 2001; Harris, Kolovos and Lock 2001; Harris, Fury and Lock 2005). Although interesting, further discussion of the agenda-setting role of marketing communications as a business-to-business function is beyond the scope of this thesis.

The nature of the political product as the exchange of an abstract product containing a combination of promise, potential and past track record with product characteristics, such as the image of the politician or political party, is well suited to the AMA (2007) definition of "offerings that have value". This conceptual framework provides the most significant asset to the study of political advertising, and the way in which advertising can elicit a physiological response as an offer that is both valued and valuable to the consumer. Prior studies that have recognised the centrality of the political marketing exchange process are summarised in Table 2.2.

Table 2.2: Political Exchange in Summary

Author	Key Attributes of Political Exchange
Lock and Harris (1996:21)	See political exchange being central to their definition of political marketing as:
	"The study of the processes of exchanges between political entities and their environment and among themselves, with particular reference to the positioning of those entities and their communications."

	 Exchange is focused on government, either winning it or influencing it. Three key actors: government, voter-consumer, political entity. Politician and party can be both initiator and receiver of exchange.
O'Cass (1996, 2001)	 Based on broader exchange relationship concept of Kotler (1972) where exchanges can take place between any social entities and consumers. Do not seek to impose marketing frameworks onto the political market but they are seen as valid approaches to it. Create and exchange offerings of value with target markets or market.
	"exchange takes place when a voter casts his or her vote for a particular candidate. They are engaged in a transaction and exchange time and support (their vote) for the services the candidate offers after election through better government." (at 1996: 46).
Newman (1999)	Value is offered by a politician to a consumer who then decides on what product offering they wish to purchase based on the best perceived value offering to them. Five main domains drive voter behaviour: political issues, social imagery, candidate personality, situational contingency, and epistemic value.
Kotler and Kotler (1999)	Based on exchange theory of Begozzi (1975). Exchange in politics is where "candidates dispatch promises, favors, policy preferences and personalities to a set of voters in exchange for their votes, voluntary efforts or contributions".
O'Shaughnessy	Exchange concept is based on the definition of marketing

(2001)	by Gronroos (1990).
	 "Mutual exchange and fulfilment of promises" between political entities and voters (1048).
	 Relationships between political entities and voters are built on this exchange.
Henneberg (2004)	 Political marketing management is concerned with managing the exchange process. Non-economic exchanges need to be examined and considered differently to economic exchanges, especially the value in exchange. For example, social marketing has been able to emerge as a distinct area by examining exchange from a non-economic perspective. Only considering economic exchange paradigms restricts discussion of marketing in non-economic exchange areas.
Butler and Harris (2009)	New models of exchange required in political marketing to understand new complexities in political markets. Vargo and Lusch (2004) reinforce the need to consider new models of exchange and have challenged the very foundation stone that underpins the discipline.
American Marketing Association definition (2013)	All activities associated with receiving something from someone by giving something voluntarily in return.
Hirschman (1987)	Two types of exchange: single or abstract (the outcome of social interaction that occurs during a series of resource exchanges, for example cooperation, and/or the strategies and action transformations used by participants in the exchange to acquire the resource (98) and multiple exchange (where multiple categories of resources are exchanged and cross category resource exchange patterns, 98). A vote is a multiple exchange transaction, consisting of the vote itself and the time taken to decide the vote by the consumer, in return the voter receives governing and the promotion of a certain type of ideology from the political

organisation. Foa model of resource exchange (Begozzi 1975) the social content of the exchange influences the content of the resources sought and offered, for example ideological and political exchanges occur in elections and other government institutions. Foa model of resource exchange can help understand the exchange that takes place when a person buys a person, for example politics or dating. Ormrod, Henneberg Triadic exchange model for political process that seeks to explain the complexity of linked relationships of the political and O'Shaughnessy (2013)market. As these relationships are all linked, there is one singular exchange that takes place. Three main types of marketing in politics are linked to the three types of interactions that take place in the exchange: parliamentary, electoral and governmental. Parliamentary exchanges take place between elected politicians. Electoral exchanges between voters and parties and candidates. Government interactions between governments and citizens. Only certain stakeholders are recognised as being part of the exchange process. Henneberg and Exchange models can be based in either marketing or political O'Shaughnessy science literature. (2007)Marketing literature has been too easily accepted into political marketing exchange theory without understanding or being adapted to the unique characteristics of the political market. Exchange can be difficult to obtain as knowing what consumers value in the political market can be difficult to obtain. Tryadic not dyadic exchange in political marketing. Values can be valued in exchange. This also makes it difficult

to establish how consumers perceive value.

There are many different political exchange situations and all

of these need to be modelled to be fully understood:

"political marketing theory needs to understand the interplay between electoral exchanges (campaign-based political marketing) and policy implementation (government-based political marketing) as part of the overall political system that can be explained by a 'service logic (Vargo & Lusch 2004), that is, a process of promises and delivery/implementation that is 'co-produced' by all involved actors." (20)

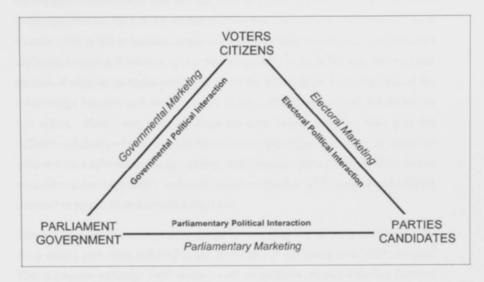
Political exchange characteristics not yet fully researched or developed.

Different to commercial marketing.

Linkages to other constructs are not yet fully understood or researched and political marketing has not been rigorous enough in setting constructs and clear delineations.

Recently, Hennberg and Ormrod's (2013) paper discussed this level of exchange complexity in political marketing. They see the many interdependencies and complex linkages in politics as being "discrete interactions" and part of a wider political exchange. The authors outline this as the critical difference between political exchanges and commercial ones, which they present as a conceptual model of the triadic exchange of political marketing management (Figure 2.3).

Figure 2.3: Triadic Exchange Model of Political Marketing



Source: Hennberg and Ormrod (2013)

This model is reflective of the exchange process that takes place in political marketing. However, it does not recognise the role and influence that individual stakeholders can have on the political process and the co-creation of value that many now seek. For example, lobby groups, special interest groups or in the United States, the Super Political Action Committees (Super PACs), are influencers of political outcomes. This was confirmed by Lusch and Vargo (2012) who emphasised that there is no such thing as 'consumers' or 'producers' in exchange as this narrows the concept. Instead there are:

"...generic actors that are resource integrating, service provisioning, and value co-creating. Furthermore, in their resource integrating, service provisioning, value co-creating activities, each actor is active and dynamic, thus representing operant resources" (2012:194)

Under the Lusch and Vargo (2012) model of exchange, there are only Actor-to-Actor exchanges and networks. These exchanges operate in the type of complex relationships that Henneberg and Ormrod (2013) identify as being the nature of political marketing. For example, in creating environmental policy between the party-actor and the voter-

actor, other stakeholders will influence this primary co-creation of value through their relationship with one of these actors. The voter-actor may have a relationship with an environmental organisation that asks the voter to request a particular value offering to be incorporated into the primary exchange. The party-actor may have stakeholders, such as other voter actors or business actors who also influence the offering. Modelling this exchange, therefore, is not as simple as assuming it only happens between one actor and another. It requires an understanding of all of the stakeholders in the market and the relationships between each in the context of the exchange being created between the two actors. These same actors, through the same relationship they have with the different stakeholders in the political market, may then change their level and aspect of influence for a different exchange, making modelling the ultimate decision of a voter to undertake an exchange with a candidate and party-actor extremely complex and difficult to model or predict from a broader perspective.

This indicates that the concept of exchange in marketing and political marketing is far from settled, something reflected in the definitions of marketing from 1985 onwards. This is because exchange itself underpins all of marketing theory, even the Service-Dominant Logic of Vargo and Lusch (2004). There may be debate over how the exchange takes place, what it is and who it is done with, but there is no debate or argument that exchange is the foundation of political marketing.

Offerings of Value

The offering of value is a critical classification in political marketing as value underlies all exchange models. Whilst the type and nature of an exchange can determine the value of a product, it is the communication of this value offer to the actors via political advertising that is the focus of the thesis.

Offerings of value exist in political marketing as promises of value between the political party and the target market as the political product consisting of future promises and projected belief in the ability to govern based on the policy, leadership, candidate, party and prior track record (Hughes and Dann, 2006a). Similarly, Harrop (1990), Grönroos (1990), Newman (1999a), Kotler and Kotler (1999), Lees-Marshment (2001) and O'Shaughnessy (2001) support the notion of the political product as an intangible, abstract offering that has value for the voter and the broader society despite, as Egan (2005) points out, that exchange is often difficult to achieve when the party fails to win.

The political marketing literature recognises a range of offers of value between voter-actor and political party including the voter-actor offering votes, information, financial support and donations of time, effort and loyalty in return for the political-actor offering value, such as effective governance, government by the voter-actor's preferred ideology, influence, support and preference (Scammell 1995; O'Cass, 1996, 2001; Newman, 1999a and b; Lees-Marshment 2001; O'Shaughnessy 2001; Baines, Harris and Lewis 2002; Newman 2002; Hughes and Dann 2006a, 2006b; Hughes 2007).

Other exchanges in political marketing that take place will be dependent upon the other actor in the exchange. Whilst Ormrod and Henneberg (2013) see exchange as triadic in nature, this is contrary to Vargo and Lusch (2004) and Lusch and Vargo (2012) who see no such restriction on how an exchange can take place insofar as any actor in the political market can exchange value with any other actor in the same political market. Regardless of the type or nature of exchange, by far the exchange of most interest to researchers and practitioners though is always going to be between the voter-actor and the political entity. As most voter-actors have low involvement and interest in politics, obtaining awareness of the value offering is the first step in any process of communicating with this segment.

Within the political marketing process, marketing communications also provide a social information framework to assist the consumer in their self-identification with the political brand (Robinson 2004; Reeves, de Chernatony and Carrigan 2006). As political marketing communications are faced with a similar competitive situation for consumer attention amidst competing counter messages and rebuttal messages must create value for the voter-consumer (Jackson 2005). Political marketers have identified information, tribal identity through branding, and vicarious victory through negative campaigns discrediting perceived political opponents, as potential offers of value to be communicated to voters. Information based advertising offers rationality, and the link between the consumer's self-perception as an "issues voter" and their pursuit of policy knowledge (Andreasen, 1995, 2006; Kotler Roberto and Lee, 2002; Chen and Chen, 2003; Jackson, 2003; Sanders and Norris, 2005).

Tribal identity and loyalty through the development of a strong brand, and the social messages from the brand association, can be potential exchanges of value (Bauer et al. 1996; Hughes 2003; Hughes 2004; Chen and Chen 2003; Egan 2005; Ingram and Lees-Marshment 2002; O'Shaughnessy and Henneberg 2007; Scammell 2007; Dann and

Hughes 2008). For example, Barack Obama's 2008 US Presidential campaign was partly built around the campaign theme of Hope, and Kevin Rudd in 2007 built part of his value offering around the experience of voters being engaged and connected with the Kevin07 campaign (Hughes and Dann 2008).

Tribal reinforcement is an emotional response which is consistent with a self-identification as a "Values Voter", where the message's perceived adherence to a shared set of beliefs is valued by the consumer. The concept of tribal loyalty can be linked to brand communities (Eagar 2012) and relationships between brands and brand communities (Algesheimer, Dholakia and Hermann 2004), and also the broader marketing theories of brand preference, attitude and loyalty. Baker et al. (1986) found that the more familiar a consumer was with a brand, the more likely they were to purchase that brand, perceive it positively, motivate purchase behaviour, and have it in their evoked set. The concept is touched on in a political sense by Gruszczynski et al.'s (2013) research into the relationship between arousing images and political participation. They found that those who were more physiologically aroused by a full range of negative and positive images were also more likely to be involved in politics.

Vicarious victory is the emotional satisfaction received when viewing negative campaign messages about disliked opponents. Negative messages play a reinforcing and supporting role for those opposing the person being discredited (Bissell 1994; Hughes 2003; Dean 2005; Sanders and Norris 2005; O'Shaughnessy and Henneberg 2007). Negative advertising is also designed to raised perceived social costs of support for a candidate thus raising the level of involvement and cognitive processing involvement in the decision. As an offer of value, it may also be used as a reinforcement to the values voter to confirm their "in-group" status versus the "out-group" status of the sponsor of the attacking message.

Other aspects of idea product distribution previously regarded as promotional mix elements can be seen to deliver "offerings that have value". For example, publication of propaganda, political statements and "talking points" that assist the individual voter in persuading others to support their position can be an offering of value to a political blogger seeking content to republish to their readership (McMillian 2006) or the online activist seeking to debate others (Rosen and Ward 2005). Communications strategies such as branded political websites (Hughes and Dann 2006a), policy announcement sites (Ireland and Nash 2001), and celebrity endorsements (Hughes and Dann 2006b)

can create offerings of value for the consumer seeking reassurance that their political position is supported by other community members (Blanchfield 2006; Dann and Hughes 2008; Rinehart 2008).

The combination of exchange and "offerings that have value" incorporate the customer co-creation process, dialogue-based marketing, permission marketing and customer engagement in the marketing process into the product development and marketing communications phases. Co-creation of value through either services or embedded services has been a hallmark of the service dominant logic whereby the value is created through the customer's use of a product or service (Vargo and Lusch 2004a, 2004b, 2008).

The AMA (2007) definition builds on the co-creation platform by recognising intercustomer exchange as a means of creation, communication and delivery of value, which can be utilised by social marketing for developing community driven solutions, social norms, cultural and symbolic meanings for brands, and the interpretation of social marketing messages into ideas, values and beliefs. From a political marketing perspective, co-creation has had limited development beyond Granik's (2005) customer co-creation of value in political marketing parties and Scammell's (2007) discussion of co-created political branding.

The fourth element of the AMA (2007) definition of value to this thesis is the four target groups who are the recipients of the outcomes of the marketing process. Customers are the recipients of direct value from the political process in exchange for their time, effort, votes or cash which includes voters, active party supporters, and current party members (Ormrod et al. 2007).

Clients are those people who are the indirect beneficiaries of a policy or government action even if they did not vote for the political party. As political products are produced for the open market, they are consumed by the client/customer target market (potential voters, actual voters), and the partner market (opposing political parties, opposing voters, media and related groups) (Hughes and Dann 2006b). Partners then, in this context, are the active participants in the political marketing process. This covers the suppliers and distributors of the political marketing product and may include the media and other parties within the political playing field. Society at large represents the whole of the community as a stakeholder in the political process (Dean and Croft 2001; Ormrod et al, 2007). Whilst individual stakeholder clusters can be addressed through

segmentation strategies, Egan (2005) and Baines et al. (2003) emphasise the difference between commercial and political marketing in that the end result of successful political marketing is the need to address the needs of all stakeholders whilst in office.

The Role of Loss in Political Marketing Exchange

The role of loss in exchange has only recently become of interest to marketers as they start to redetermine the definition and role of exchange into a concept that can be more readily applied to the practice of marketing and is less concerned with the economics of marketing (Sheth and Uslay 2007).

Sheth and Uslay (2007) make the point that exchange paradigm is driven by self-interest, which results in a win-loss scenario whereby the organisation benefits at the consumer expense. They highlight the move away from value being created to meet a need to being more of co-creation, driven by both actors in the process. This actor-to-actor concept has been further developed and expanded on by Vargo and Lusch (2012) in their work. This actor-to-actor exchange model of Vargo and Lusch (2012) means that marketing is no longer concerned with the economics of exchange, but more the broader paradigm and context in which exchange can develop and evolve in the context of a unique transaction, encapsulating as Sheth and Uslay (2007) note all aspects of the marketing function.

In a political context what this means is that if marketing exchange can be seen from a co-creation perspective as Sheth and Uslay (2007) and Vargo and Lusch (2004, 2012) have stated then if the consumer is receiving a negative value in exchange from the organisation or other actor as a result of the co-creation process then this can make that exchange one of loss for the consumer. For example, if a voter votes for a party that then loses an election then the exchange has not been of value as that party is less likely to be able to implement the policies that it offered the voter as it is not in a position to govern. Conversely, if a party allowed voters to co-create policies with it but then those policies were altered due to the role of other stakeholders in the exchange process then the exchange will have been one of loss for those consumers. An organisation actor may also experience loss from a voter if that voter decides to change their vote to another actor and thereby make it difficult for a political organisation to achieve long-term societal, political and economic reform that it may have thought possible when it co-created value with the voter initially.

The definition of Political marketing exchange needs to reflect this notion of co-created value having the potential of containing loss and not just value.

Therefore the definition of political marketing exchange is an exchange between two actors in political markets and networks that are active and dynamic in co-creating, service provisioning and resource integrating offerings of value with one another that will obtain each a net gain.

The concept of value co-creation in politics may be hard to conceptualise as it could be argued that political parties only offer value, they do not co-create it. But this would only be the case if the role of stakeholders in politics was ignored, which is impractical and not realistic of how modern politics functions in most political markets around the globe (Hughes and Dann 2009).

Exchange and Political Marketing Communications

Explicit in the definition of marketing, and political marketing, is the communication of any offerings of value. Whilst communications can take many forms, television advertising is by far the most dominant method used in political campaigns due to its ability to reach several markets in a short space of time with messages of value exchanges. However, what television advertising is the most effective to use in a political marketing campaign has not been widely examined from the perspective of the promise of value and promise of loss exchange perspective. Most research in this area has focused primarily on negative advertising's role in influencing voter turnout, attitude towards the brand and democracy (Marcus, Neuman and Mackuen 2000), and attack strategy, but not on what promise of exchange, be it loss (negative advertising) or value (positive advertising), is the most effective.

Prior research in political advertising has found contrasting findings when it comes to the use of negative advertising and liking towards the advertisement. Some studies, such as those by Merritt (1984) found negative advertising to be used as an information gathering method by some voters, and Pinkleton (1997) who found that negative comparative advertising was effective at lowering the evaluations of attacked candidates whilst not harming the sponsoring brand. Lau and Rovner (2009) also identified a similar source credibility effect of negative advertising but from a practitioner perspective. They theorised that practitioners would risk using negative advertising even with a backlash effect if it meant that the net effect would be to harm their opponent and help their campaign. Fowler and Ridout (2013) more recently point to the fact that

negative advertising is successful at getting media attention to a campaign and, therefore, free and credible publicity, highlighting another perspective on how the effectiveness of advertising can be measured.

However, there is also evidence that negative campaigning whilst memorable (Lau and Rovner 2009) is also perceived by voters negatively (Garramone 1984; Surlin and Gordon 1977) and may lower attitudes towards the sponsoring brand for its use (Garramone 1984; Garramone and Smith 1984). Other research (Lau and Rovner 2009; Lau, Sigelman and Rovner 2007) notes the lack of scientific research into negative advertising and support for its use. Lau, Sigelman and Rovner's (2007) meta-analytic study of negative advertising found little scientific evidence for the use of negative advertising across several decades and methodologies. Yet it is still used and continues to be the preferred method of communications in election campaigns. As Lau and Rovner (2009) theorise perhaps this is because whilst several messages may not be effective, it only takes one message to work to achieve communication objectives and perhaps they could also be used more in a strategic sense, such as getting a response from the attacked party or influencing turnout, than in a communication sense.

From a promise of exchange and the definitional context, the use of negative advertising to communicate value is not supported. The very definition of marketing itself focuses on the creation of value and, even with the advent of SDL and the Actor-to-Actor cocreation of value exchange (Lusch and Vargo 2012), value lies at the heart of exchange in marketing. The uniqueness of political marketing is located in the fact that dual exchanges are communicated - the exchange of loss that could occur, and the exchange of value being created with the market and stakeholders. The promise of loss could be just as significant in influencing behaviour change as the promise of value, as this loss is linked into fear of experiencing long term post-purchase cognitive dissonance. It is this exchange that could be the very reason why negative advertising is effective with some voters. In a close election where the result can be decided by narrow margins of a few percentage points, these voters could make all the difference between winning and losing. Although recall does not equate to liking, it does demonstrate top of mind awareness, which in turn makes the message more memorable, and easier to act upon, than others messages encountered. However, the efficacy of promise of positive gain versus the promise of a risk of loss through negative messaging is still unclear. This, therefore, leads to the development of the first research question:

Research Question 1

What promise of exchange has higher recall from voters: the promise of value or the promise of loss?

If voters are concerned with overall net gain in an exchange with an actor then this should mean that they will be more interested in a promise communicated to them that is about value and not loss. That is they should be able to recall a positive message more than a negative message as this message is one offering value. A negative message works on the communication of loss – that is that by engaging in an exchange with another actor the voter actor will experience loss in that exchange. From a marketing exchange perspective a voter actor should be more interested in the promise of value than of loss as they are seeking to benefit from any exchange. If there interest is higher they should be more likely to pay attention to and remember information in a positive message than a negative message.

However whilst most prior studies in political advertising have focused on negative advertising and what makes it so effective from a political perspective, another area of research may help explain what makes negative advertising better at achieving recall. This area is psychophysiological research that examines how a person responds to stimulus by using biometric measures to record their reactions in real time.

Psychophysiological research has used biometric measures to understand how a person responds to different stimulus, such as advertising, television scenes and static images, such as photographs and forms of print such as newspapers. Newhagen and Reeves (1992) found that television news scenes that contained negative images or content were remembered better than other content, with the findings highest when the content contained semantically intact audio information such as screams, sirens or crashing sounds. These findings were re-confirmed in a later study by Newhagen (1998).

Other studies in this area also found similar results for the recall of negative images. Lang, Dhillon and Dong (1995) found that arousal and memory of negative images in television was higher than for positive messages. Lang, Newhagen and Reeves (1996) examined negative television scenes and how this influenced the limited capacity for information processing of a viewer and further confirmed these findings. They found that negative images increased attention, took up capacity for the processing of information in this message, and increased retrieval of the negative content over other

types of content. Bradley, Angelini and Lee (2007) provides the greatest context for this research question in this thesis. They examined whether negative political advertising elicited automatic activation in the aversive motivational system and found that, as part of this activation, memory for negative advertising was higher than other types of messages. Additional discussion of recall, and the methods of measuring recall are addressed in Chapter 3.

One other theory worth considering is that if negative advertising is credible enough to be believed by a voter, not necessarily liked but believed enough for that voter to think about its content, then this could make the message effective over positive messages. One way of measuring this would be to examine the recall for negative messages over positive messages. If free recall scores in particular were higher for negative advertising than positive advertising this could suggest that they are being better remembered and that perhaps they are effective at making voters think about politics more, even though they may not have any liking to these messages.

Understanding what promise of value that is recalled over others will help further knowledge about not just what makes political advertising effective, but also the duality of exchange in political marketing. That is, are promises of loss that are co-created with voters more likely to lead to lead to voters seeking out promises of value from parties or are voters prepared to have some loss in their exchange as long as the net gain from the exchange relationship is a gain.

This leads to the development of the first hypothesis:

Hypothesis 1: Negative political advertisements will be better recalled than positive political advertisements

The hypothesis examines the relationship between arousal, memory, and the political message's elements of structure and content. As television advertising has two main components, content and structure, no study into television advertising would be complete without examining the relationship between structure and content. However as there are so many elements of structure (cuts, edits, zooms, camera changes, length, onset of music and use of colour) that make up a television advertisement only one or two can be examined in an experimental study at any one time.

This makes it necessary to focus on the elements that have the greatest impact on memory, as the ability to recall the key features of each type of promise has a significant impact on the effectiveness of that message. Without the capacity to recall the message, the voter cannot access the promise during the voting decision-making process nor are they aroused to undertake any action in changing their behaviour. This would make the message ineffective, as the two main objectives of any message are to influence the behaviour of the consumer through their purchase intention or brand preference, and to develop a favourable attitude towards the advertisement and the sponsoring brand.

Therefore, the content of the message is important in influencing how a voter may respond to the communication of promise. If the promise is for value, then the message should be positive in content and aim to arouse action within the viewer through a positive emotional response to the message.

However if the promise of exchange is negative, using a negative advertisement could be dangerous as whilst negative content is likely to create high levels of arousal (Newhagen and Reeves 1992; Lang, Newhagen and Reeves 1996), there is also a risk of developing a negative attitude towards the advertisement and brand. Pinkleton, Um and Austin (2002) found that after viewing a negative advertisement a participant is more likely to be negative about the political system and political campaigns than participants only exposed to positive messaging.

Then there is the link to brand resonance due to party loyalty or affiliation. A positive message from those with an affiliation and connection to the brand should resonate more than a negative message (Keller 1993, Keller and Lehman 2006). Keller (1993) found that positive brand equity in a brand exists when a consumer responds more favourably to an element of the marketing mix used by that brand than when that element is attributed to another brand.

This positive equity is essentially how much resonance a consumer has with a brand. In the case of political marketing the more resonance or liking towards the message from the brand, especially a positive message, the better the chance of that message having an impact on the consumer behaviour of a message.

Keller and Lehmann (2006) noted that brand intangibles, or the non-physical attributes of the brand, remained an important research area for those undertaking brand research.

Specifically they noted (at 741) that the following was an important research question that needed to be addressed:

"When and to what extent does recall of pleasant images (or "hot" emotions) shield a brand from less positive or even negative cognitive information?"

This makes understanding the role of valence in political advertisements important in understanding not just what impact this has on positive brand equity, but also on what level does a positive advertisement differ from a negative advertisement in the relationship with recall of the brand.

Added to these content effects are also the effects from the other features of television advertising – structural features. Whilst an advertisement consists of many different structural features, it is those that present new information to viewers that have the greatest impact on memory (Lang 2000). This is because any new information must be attended to and processed by viewers. Yet all viewers only have a limited capacity for message processing and once this limit is reached then consumers can no longer process new information as effectively as before the limit (Lang 2000). This makes the use of cuts an important structural feature of a commercial, as every time there is a cut new information is presented to the viewer that they must process (Lang 2000).

A commercial with lots of cuts is also presenting lots of information to the viewer, but at the same time could be presenting too much information to the viewer, if they have already reached their capacity for message processing. Yet political messages are varied in the number of cuts as there is little knowledge about how many cuts, or how much information, should be presented to voters.

Messages can also vary in the amount of visual and verbal information presented during each scene, and combined with the number of cuts and the valence of the message itself can influence the emotional response to the message and memory for the message elements.

This, in turn, can influence the memory and attitude towards the type of promise being made, which means that this can also affect how voters develop brand and advertisement preference and attitudes which, therefore, influence their purchase decision, or vote. This leads to the second research questions for the thesis:

Research Question 2:

What combination of pacing and valence is the most effective to use in a political marketing campaign that can achieve recall and favourable emotional response from the market? Therefore, which type of message will influence the perception of the promise of exchange being offered to the market by the brand of their preference?

The concepts of recall and memory are discussed later in this chapter, and are a component of the data collection outlined in Chapter 3. For the purpose of this chapter, recall is a key element of access to the political promise – without the ability for the political promise to be remembered at the point of political consumption – voting in the ballot box – there is neither delivery nor exchange of promises of value.

Advertising Theory

This section of the literature review will overview the relationship between emotion, memory, valence and structure in advertising theory generally and especially in television advertisements. A brief background on advertising is discussed, followed by an identification of the components of a television advertisement and their roles. The structure of television advertising as a dynamic communications method is discussed next, including the three variables of structure, format and time. Hypotheses are drawn from these areas of the literature that address some of the concepts discussed in Research Ouestion 2.

The adaptation of commercial marketing television advertising theory by political marketing is outlined, along with emotion and memory theory, with an emphasis on emotional responses to television advertising. Specific elements involving consumer responses to dynamic messages in the context of commercial marketing, and adapted to political marketing campaigns will be examined. Theories as to the differing responses by types of advertising messages including format and structure will be addressed in order to identify a physiological and behavioural measure to identify changes in a consumer's emotional levels during a television advertisement. Finally, the section outlines the role of emotion in advertising, including in brand preference formation and memory recall.

A brief background on advertising

Advertising has been defined by the American Marketing Association (2012) as:

"The placement of announcements and persuasive messages in time or space purchased in any of the mass media by business firms, nonprofit organizations, government agencies, and individuals who seek to inform and/ or persuade members of a particular target market or audience about their products, services, organizations, or ideas"

Rossiter and Bellman (2005) identify advertising as the most effective form of marketing communications used by an organisation to raise awareness of a product and achieve sales objectives. Advertising is used as part of a broader campaign to achieve communication objectives, such as increased levels of brand awareness, and to achieve sales objectives, such as market share.

The primary objectives of advertising are to inform consumers about new products and where they can purchase them, remind consumers to continue using certain products, persuade consumers to choose one brand over another, to reinforce and build relationships with customers and to assist the other elements of the marketing mix to achieve their objectives (Leiss et al. 2005). Advertising's main strength is that it is the main medium used to reach a mass audience and the most effective vehicle to use to achieve communication objectives for a product, such as brand awareness, brand attitude and brand preference, and sales objectives (Petty, Cacioppo and Schumann 1983). Its main weakness is cost to achieve reach and frequency targets, and the competing background of noise that can dilute the effectiveness of messages (Hoch and Ha 1986).

Classification of Advertising

Advertising can be classified into dynamic and static categories. Dynamic mass media advertising is constantly changing due to the electronic or interactive nature of the media and incorporates radio, television and internet advertising. Static mass media which is in a permanent state and does not undergo any changes this includes include print such as newspapers and magazines or static advertisements in movie cinemas, and outdoors such as billboards, transit stops or on roadways. Message duration is a distinguishing factor between the two formats as dynamic media is time constrained by design to deliver a changing message within a budget, content or broadcast requirement constraint. Static media is not bound by time in the sense that the message does not change during the course of observation and consumption.

Additional categories of advertising types have been identified in the literature by Rossiter and Bellman (2005) who proposed a three part categorisation of advertising based on content addressing a brand, eliciting a direct response or furthering a specific corporate image in the mind of the consumers. Brand advertising aims to increase consumer awareness of a product level brand through placement in many different types of mass media, where the message has the responsibility of providing information regarding the existence of the brand, and messages associated with the consumption of the branded product (Rossiter and Bellman 2005). Direct-response advertising seeks to elicit a response to the message, such as information search, product trial or product purchase (Rossiter and Bellman 2005). In political marketing, this would equate to fund

raising, calls for donations, pledges or membership drives. Corporate image advertising is designed to elicit positive attitudes towards the corporate or umbrella brand, rather than individual products, and can be undertaken to influence corporate reputation, repositioning or retail outlet selection (Rossiter and Bellman 2005). Political marketing has increasingly depended on corporate image advertising for leadership position, policy, attack adverts and party endorsements. For the purpose of this thesis, only the overall valence of an advertisement, and the pacing or speed of the advertisement will be examined for their role in creating emotive responses. The purpose of the advertising is assumed to be to stimulate behavioural responses through attention to the message that transfers the message into memory measured by recall, liking or recognition, or arousal to the message that creates an emotional response to the brand and message.

General Models of Advertising Response

To understand why it is that advertising impacts upon the brand equity, or resonance, that Keller (1993) discusses it is important to understand some models of consumer response to advertising stimuli.

Firstly, advertising influences consumers through communications effects. The Rossiter and Bellman (2005) version of the Holbrook and Batra (1987) model demonstrates how marketing communications has three simultaneous levels of effects on a consumer responses. Figure 2.4 outlines the initial processing stages.

Figure 2.4: Customer Response Steps



Source: Rossiter and Bellman (2005)

Consumers are assumed to move through a sequence of four steps in response to marketing communications (Greenwald and Leavitt 1984). Although presented as a linear sequence, these steps do not necessarily occur over a delayed period of time and may occur simultaneously once a consumer is exposed to a marketing communications message as seen in Figure 2.5.

LEVEL I LEVEL 2 LEVEL 3 Customer decision Ad or promotion Brand communication effects stages processing Not in Category Attention need the market Brand Need arousal Learning 4 awareness Brand Search and **Emotions** preference evaluation Brand action Purchase Acceptance intention Purchase Usage facilitation

Figure 2.5: Three Simultaneous Levels of Marketing Communications Effects

Source: (Greenwald and Leavitt 1984 in Rossiter and Bellman 2005)

As a consumer is going through these steps, marketing communications is influencing them on three levels. Each level influences the others and, therefore, one level may be more important in influencing the action undertaken by the consumer as a consequence of being exposed to the message. For example, the emotion a consumer feels towards an advertisement will affect their purchase intent of a product and lead to action in the audience.

For the purpose of the thesis, the effect of emotion from the first level processing affections on communication effects and decisions stages is the focus here. Whilst Holbrook and Batra (1987) and Bellman and Rossiter (2005) have examined the impact of emotions on attitudes towards television advertising, and emotion on attitudes

towards the brand, the thesis will expand this research by examining the interaction between attention and emotions in the context of political brand communication effects.

All models of advertising work on the assumption that the viewer needs to be exposed to the message, and has to respond cognitively or emotionally to the message in order to be influenced by the message. This is why understanding what message arouses a viewer emotionally and in a way that they can encode and remember the message so that it changes their behaviour is important to understand.

One critical feature affects all models of advertising in a television context is one critical – how dynamic it is due to the construct of time. This means that a television advertisement due to its twin features of structure and content can present new information to be processed whenever this is different from the previous scene. How much information that is required to be processed is dependent upon how much new information is presented by the change in scene and structure.

This dynamic feature of television advertising is both a strength and weakness of this form of communication. This is a strength because information can be presented in such a way that the viewer can encode the message into their memory and then be persuaded to change their behaviour because of their emotional response to this message, sometimes without realising that this is what has happened. This is a weakness because presenting too much information and in the wrong way can prevent the message from being encoded and, therefore, fail in being encoded and remembered.

This weakness was first explored by Kahneman (1973) in his seminal book, *Attention and Effort*, which examined the relationship between the amount of information a person was exposed to and their attention to this information. Kahneman found that a person had a limited capacity for attention at any one time, but the capacity was variable depending upon several factors, including the stimulus and the person's involvement levels with the information they were being exposed to. In many ways Kahnemann's (1973) work, which he extended into other areas of research, laid the foundation for much of the work in advertising relating to involvement with messages and attention to them.

This is reflected by research by Lang et.al. (1999) and Lang (2000, 2006) into television advertising, which is relevant to this thesis as it explored the relationship between structural and content components and attention to a message. Lang (2000) and Lang

et.al. (1999) found that the more information a viewer was presented with, the more their limited capacity for attention would be used up. Once the capacity was reached then a viewer's attention levels would drop away dramatically and focus on secondary tasks not related to the primary stimulus they were being exposed to. In a practical sense this could mean, for example going off to make a cup of tea whilst the television program was still running or half way through a message break.

Due to the complex nature of predicting when this capacity might be reached it was easier for researchers, such as Lang, to understand how this capacity could be used up quickly. Lang found that certain structural features, such as pacing (the number of cuts in a message) and edits, were presenting new information to the viewer every time they occurred, using up the capacity for information processing of the viewer.

Lang also found that certain types of content could also use up this capacity due to the human body's response mechanism to stimulus, especially negative stimulus. This natural "fight or flight" response of the body to viewing negative stimulus means that it is given more processing resources than other stimulus, but it also means that for this reason that arousal is increased towards the message.

However, other elements of the message itself can also influence the processing of the message, such as message appeal type, for example humour. A consumer's attitude towards the advertisement and sponsoring brand, and involvement with the product category is also important as it moderates involvement with the message and the information in it.

These elements are part of the level 1 effects of the Rossiter and Bellman (2005) model. Whilst these aspects of television advertising are important, it is arousal to political messages from a structure and content perspective that this thesis is examining, therefore, these elements will not be under consideration in this study.

Political Advertising

As in other forms of marketing, advertising is the single biggest expense of political marketing campaigns and this reason is primarily due to the use of television advertising to achieve communication objectives. Kaid (2012) notes political advertising continues to be the foundation of political marketing, both in the US and the rest of the world regardless of the political system or culture. Political advertising has covered a wide

range of communication platforms even from its early history, such as Atkin and Heald's (1976) study into the effects of radio and television political advertising on cognitive and affective orientations, Rothschild and Ray's (1974) study into how advertising affects involvement with politics, and Kaid and Sanders's (1978) investigation into how the type and length of political television commercials influenced consumers.

Research in political advertising has varied in motivation, methods and context ranging from understanding democratic effects, such as influencing voter turnout (Marcus, Neuman and Mackuen 2000), to understanding consumer behaviour by using methods, such as surveys, to scientific methods such as psychophysiological measures, such as eye tracking heart rate and skin conductance (Bradley, Angelini and Lee 2007; Lang 1991).

Research into dynamic types of political advertising has focused on the television advertising as the main method of influencing consumers of political products. Political advertising has been a dominant form of communication between politicians and the voting public (Kaid 1997). Political campaigns have historically emphasised television commercial (TVC) spend with up to 70% of political marketing campaigns focusing on TVC spend compared to an average of 35% for commercial campaigns (Miskin and Grant 2004).

Similarly, Miskin and Grant (2004) demonstrated the relatively low spend on static advertising at 20% in some campaigns with the remaining 10% split across the other advertising alternatives, such as print and radio (Miskin and Grant 2004). Television advertising spend in an election campaign has been estimated at 70% of the total spend (Miskin and Grant 2004). Consumer attention of television advertising in election campaigns in Australia reinforced this point, with an average of 70% attention paid to television advertising on the five federal campaigns held during the period 1990-2001. Figures for newspaper advertising material averaged 60% and radio only 47% (Australian Electoral Studies as per Miskin and Grant 2004). The 2012 US presidential campaigns saw television advertising remaining as the dominant form of political communication.

Defining Political Advertising

Just as the domain of political marketing still is unsettled on key areas such as exchange, stakeholder classification and the political market, so is one of the key components of political marketing management: political advertising. Differences exist between practitioners and researchers, and even here differences among researchers and differences among practitioners. In Australia, for example, the main practitioner self-regulation organisation, the Advertising Standards Bureau, defines political advertising as:

Political advertising is advertising that attempts to influence or comment upon a matter which is currently the subject of extensive political debate. It includes advertising or marketing communications about a political party, representative or candidate, advertising about political issues or issues of public interest, and advertising in relation to government policies (whether published/broadcast by the government or someone else). Advertising by Government, political parties, lobby groups and other interest groups may fall into this category, and advertising may not just be during elections. (2013)

Political advertising does not have a commonly accepted definition; however, commonality exists with regards to the focus on communication being paid, and being political in nature. The most cited definition is that by Kaid in the *Handbook of Political Communication* (2004: 154) who defines political advertising as being:

"...any message primarily under the control of a source used to promote political candidates, parties, policy issues and/or ideas through mass channels.

Holtz-Bacha and Kaid (2006) updated this definition to take into consideration that political advertising does not just use mass channels, particularly in the era of the Internet and social media (Kaid 2012). The updated definition is:

"...a means through which parties and candidates present themselves to the electorate, mostly through the mass media" (Holtz-Bacha and Kaid 2006: 3)

These definitions have their foundations in both the political marketing and advertising literature. The American Marketing Association defines advertising as being:

The placement of announcements and persuasive messages in time or space purchased in any of the mass media by business firms, nonprofit organizations, government agencies, and individuals who seek to inform and/or persuade members of a particular target market or audience about their products, services, organizations, or ideas. (American Marketing Association, 2013)

This definition has clear linkages to the definition of marketing, and also the central tenet of all marketing theory: the ability to communicate offerings of value to target markets to facilitate exchanges. Whilst the political advertising definitions of Kaid, and others, do not specifically mention the definition of advertising used by the AMA, it can be assumed that Kaid takes this definition into consideration when framing the definition of political advertising under the broader umbrella of marketing communications.

Televised Political Advertising

Televised political advertising has been defined as

"moving image programming that is designed to promote the interests of a given party or individual" (Kaid and Holtz-Bacha, 1995: 2).

As political advertising uses communication channels to get the message to the market, its development as a method by political marketing managers is related to the development of media communication methods. This meant print was dominant in use in political advertising until the emergence of television as a mass communication method in the 1960s and 1970s. Television took over from newspapers as the most widely used method of political communications with the advent of colour television in the mid-late 1970s around the globe, and has remained there ever since.

Global figures on actual spend on televised political advertising are hard to ascertain, likely to be in the \$US hundreds of millions a year, although Plasser and Plasser (2002)

provide a good summary of indicative costs in most countries of the world. Without any doubt the most expensive and probably the most intensive televised political advertising campaigns take place in the US Presidential elections, held every four years. The 2012 US Presidential election had an estimated three million television advertisements and cost at least \$US2 billion (Fowler and Ridout 2013).

The current challenger to television advertising is the Internet, more specifically social media. The emergence of the Internet first started as internet penetration into homes started to reach over the 40-50% levels in most parts of the world by the late 1990s, early 2000s.

Despite, the emergence of Google and YouTube in the 2007 and the emergence of smartphones that helped grow social media websites that compete for screen space, there are now multiple methods that a political campaigner can use to reach multiple markets simultaneously. In some cases, such as the Arab Spring Uprising (Shirky 2011) or the Euro Crisis (Stieglitz and Dang-Xuan 2013), this can be done more effectively than television, radio or print due to higher levels of engagement, involvement and interaction with the message and other stakeholders.

As a high visibility broadcast medium, television advertising has been favoured by political marketers and the political campaign industry. For example, in the 2012 US election, Mitt Romney's campaign in the Florida primary resulted in 13,000 television commercials across several networks to influence Republican voters at a multimillion dollar cost, which accounted for a larger proportion of the advertising spend than other platforms (The Washington Post, 2012).

Types of Televised Political Advertising

Political advertising plays a dual role of ensuring that the public is aware of an opponent's weaknesses whilst promoting the sponsoring candidate's strengths and policy differences (O'Cass 2002; Pinkleton 1998; Meirick 2002; Roddy and Garramone 1988). Candidates can control the message sent to the target audience and its format, and can associate the sponsoring candidate with positive images and their opponent with negative images (Roddy and Garramone 1988; Christ, Thorson and Caywood 1994; Niffenegger 1989). As political products are usually associated with a personality, several researchers have suggested that the most effective means of highlighting

differences between one political product and another is to use advertising that associates negative images with opposing candidates (Roddy and Garramone 1988; Lau et al. 1999; Pinkleton, Um and Austin 2002; Meirick 2002; James and Hensel 1991; Sorescu and Gelb 2000).

Political advertising uses both positive and negative campaign messaging. Although negative advertising is not unique to the political market, the use of negative "attack ads" on competing brands is far more widespread. Nearly all Western democratic elections have been dominated by the use of negative advertising media (Miskin and Grant 2004). In the 2012 Republican Presidential Nomination campaign, over 76% of television advertisements shown up until 6 March, 2012 were negative (The Washington Post 2012). Although advertising is commonly applied in political marketing, limited research has examined the effect of political advertising upon a consumer's emotional engagement with the political brand, democratic processes and institutions.

Negative Advertising

Negative advertising can trace its history back to the early part of the 20th Century and has been frequently used as a campaign tool by political parties. Kaid (1997) noted that, during the 1980s, around 30% to 50% of all political advertisements during campaigns were negative; however, in 1992 and 1996 just under 70% of the advertisements in Bill Clinton's campaigns were negative. Despite this growth in the use of negative political advertising, some research have suggested it harms the democratic process (Faber Tims and Schmitt 1993; Garramone 1984; Roddy and Garramone 1988; Schenck-Hamlin, Procter and Rumsey 2000; Jasperson and Fan 2002).

The factors present in negative political advertising vary according to the type of advertising appeal and message frame used. Using the definitions outlined above, the defining factors of a negative advertising campaign include:

- A negative message (Meirick 2002; Richardson 2001; Lau and Pomper 2001; Pinkleton 1997; Johnson-Cartee and Copeland 1991; Roddy and Garramone 1988).
- Paid advertising forming part of the overall communications strategy (Pinkleton 1997; Rossiter and Percy 1987).

- Advertising sponsored by one candidate who directs it at a political opponent (Bullock 1994; Haddock and Zanna 1997; Kaid 1997; Shapiro and Rieger 1992; Hill 1989).
- A typically comparative approach (Shapiro and Rieger 1992; Pinkleton 1998; James and Hensel 1991).
- A focus on issues and image, rather than policy (Pinkleton 1997; Kaid, Chanslor and Hovind 1992; Johnson-Cartee and Copeland 1989).
- An emphasis on a certain target audience during a campaign (King, Henderson and Chen 1998).
- Specific attention to a particular image or issue that a candidate is associated with (King, Henderson and Chen 1998).

Based on the above characteristics, negative political advertising can be defined in the political marketing literature as

Advertising that targets the attacked candidate's weakness in issues or image and that highlights the sponsoring candidate's strengths in these areas by sending a negatively framed message.

A gap in the political marketing literature exists with regards to the effectiveness of negative advertising. As negative advertising is currently the dominant advertising method within political campaigns, presumptions of success have carried the approach from one campaign to the next. This raises a question of whether communicating a promise of loss is more effective than communicating a promise of value. Although research has question the efficacy of negative advertising, such as Bradley, Lee and Angelini (2007), studies using psychophysiological methods produced a finding that negative advertising may not be as effective.

These studies, even though few in number, are indicating that whilst negative advertisements are able to generate recall about the advertisement and the brand, they are not generating arousal that may be indicative of a negative or impartial attitude towards either the advertisement, brand or both. However as these studies can only examine a small number of message content and structure variables there is more research required to confirm these findings.

The important item of note here is that most studies into negative advertising have found that there is a relationship between negative advertising and recall. However, very few of these studies have been on the content of negative advertising, not what the relationship is between content and structure in an advertisement, so the cause of this relationship needs to be examined further in a more scientific aspect.

Whilst the political marketing literature defines negative advertising on the above criteria, negative advertising is seen slightly differently by those in communication research. Whether or not a message is defined as negative or not is far broader, and not only considers whether or not the message is attacking another person or organisation. Images alone can make an advertisement negative in communication theory. For example, an advertisement for a horror movie will be defined as negative as the images are negative in content that leads to an increase in arousal by the viewer (Cacioppo, Tassinary and Berntson 2007).

Verbal elements of the message can also make a message negative. For example, an advertisement that has an unhappy voice over for an overseas aid organisation, even if the image itself is not unhappy or unpleasant, may be defined as negative due to the verbal content that is negative in the message (Cacioppo, Tassinary and Berntson 2007). Then there are the structural elements that can influence how the viewer perceives an advertisement. These are elements such as cuts, edits, zooms, lighting, sound (volume, type and length) and time of the message itself. All of these can be used in a way that can make a message appear either negative or positive, which will now be discussed in further detail.

Recall and Negative Political Marketing

Lang (2000) noted every person only has a limited capacity for message processing. Therefore, being able to recall details of a message in this environment means that the message is deemed effective. Achieving recall of the negative advertisement and brand would indicate that the viewer paid attention to the message

As political communications are one of the very few areas where consumers are exposed to both messages that communicate exchange offerings of loss and value. As a strategy, this can work in several ways. For example, messages of loss may try and strengthen the promise of value by raising doubt over the offering of the attacked brand, or by creating doubt of the existing value offering of a preferred party or candidate. Recall has been linked to brand familiarity (Baker et.al. 1986). The more familiar a

respondent is with a brand the more likely they are to recall attributes of a message from that brand, even if that message is new (Kent and Allen 1994).

This would suggest that maximising recall of a message and the brand is an important metric for political marketers. However, political marketers may not fully understand how this works in practice.

Studies in communications and psychophysiology help understand this relationship from a more scientific perspective. Cacioppo, Tassinary and Berntson (2007) note several studies where there is a higher emotional response to negative images or scenes (for example, war, forests being cut down) due to humans having a startle response or, as it is more commonly known as, a flight or fight response.

As the body is designed to prioritise attention to these images over everything else, this leads to higher recall for these images and scenes (Lang, Newhagen and Reeves 1996; Nabi 1999). Positive scenes do not have the same arousal and thus recall potential unless they are linked to a positive life experience (Miller, Patrick and Levenston 2002). This makes the use of negative imagery highly likely to achieve far higher recall than positive imagery and thus leads to the first research question to be tested.

Hypothesis 1: Negative political advertisements will be better recalled than positive political advertisements

This hypothesis is supported by Brians and Wattenburg (1996), Roberts (1995) Shapiro and Rieger (1992), Lang (1991), Lemert, Wanta and Lee (1999), and Merritt (1984). Recall, and the measurement of recall in the context of arousal, is discussed further below.

Psychophysiological Theory

Psychophysiological theory considers the content and formal elements as being important in deciding if the advertisement is negative or positive, rather than who the message might be targeted at or about. This method is the preferred one to analyse commercials as prior studies that have used negative and positive valence as variables in studies have found significant differences in how respondents view, attend and remember each. The important difference between psychophysiological communication theory and political marketing theory in this area is that the psychophysiological theory

takes a bottom up perspective whereas the political marketing literature takes a more top down approach.

Emotions

Emotion has been defined in journal papers over 80 times (Scherer 2005), making it one of the most contested definitions in academia. Emotions are of interest to researchers in many areas due to their importance in the decision making and analytical process by people. Nearly every single model of psychology, psychiatry, consumer behaviour, advertising, psychophysiology and communications has an emotional stage or focus. This is because of the importance emotions have in influencing and sometimes predicting human behaviour. Emotion can be defined as

"...an episode of interrelated, synchronized changes in the states of all or most of the five organismic subsystems in response to the evaluation of an external or internal stimulus event as relevant to major concerns of the organism" (Scherer 2005).

The diversity of reactions that make up emotions can be divided into two types (Rossiter and Bellman 2005). The first category of emotions, type 1 emotions or lower order emotions, are spontaneous and uncontrollable reactions, such as pleasure and arousal. The second category of emotions, type 2 emotions or higher order emotions, require cognitive appraisal to recognise their existence. These are emotions such as love, desire, contempt and sadness (Poels and Dewitte 2006).

Attentional capacity is the information capacity a person has that is able to decode, process, encode and store information (Lang 1996). The capacity of any person is limited due to several factors (Lang 1996), but is mediated by their emotional response to a message. From a political marketing perspective, emotional arousal that leads to recall is of interest for delivering the political message.

To understand how the levels of emotions in television advertising change due to structure and content of the advertisement it is necessary to understand how the viewer watches the advertisement, how much attention they are giving to the message and when they stop paying attention. Although this type of research is not new to the study of television or to the study of emotions, this approach has not been used in the area of political advertising before to understand how viewers pay attention to and are aroused by television advertisements of political messages.

Psychophysiological Measures of Advertising

Psychophysiological measurement allows for phenomenological issues in communications and advertising to be better understood in the context in which they occur. This is both in the mind of the respondent and the environment in which the viewing may occur.

As such, this area of research is growing rapidly as researchers recognise the advantages of being able to capture the measurement and meaning of the cognitive and emotional processing of media, extending knowledge and understanding of the unique phenomenological aspects of marketing and communications when used in practice. Prior studies on the effects of political advertising on consumers have used methodologies that have not measured the psychophysiological responses of respondents to the material they have viewed.

Attention is important in understanding how a viewer's memory, physiology and behaviour are being affected by the medium (Lang 1990). There are two main areas of attention research in advertising: intermedia – advertising across different types of mediums – and intramedia – advertising within the one medium (Lang 1990). Intermedia is concerned primarily with tonic responses which are long term responses that reflect a viewer's decision to attend to specific program or medium.

Intramedia is concerned primarily with a viewer's phasic responses, which are short term responses that reflect brief changes in the level of attention of a viewer during a single media presentation (Lang 1990). As this research is concerned only with television advertising it will be using a more appropriate intramedia methodology that will examine a viewer's phasic response to televised political advertisements.

Psychophysiological Approaches to Media

Reeves et al. (1985) brain waves electroencephalography (EEG) study into the orienting response (OR) of respondents was the first study using psychophysiological information to move past the two variables approach of earlier studies. It was also a landmark study in the area because the orienting response became an important measure in attention and arousal of media. This work also had its roots in the work by Posner, Snyder and Davidson (1980) who examined how a person attends to objects that they view and how a person allocates priority to each of these objects.

The orienting response can be defined as being the momentary increase in attention to what's going on in the environment (Potter and Bolls 2012: 19). Orienting response can be measured by placing electrodes onto a person and measuring changes in skin conductance or brain waves. Brain waves are measured by amplifying the waves and then analysing the two different types of brain wave patterns: alpha and beta waves. These are measured on different frequencies so that they can be analysed separately. During a moment of orienting response, the beta waves increase in amplitude and the alpha waves decrease which can be measured by an EEG.

Reeves et al. (1985) decided to investigate what types of media caused orienting response by using EEG to record the responses. They broke down the time unit of analysis, often a third variable that many overlook, into 500ms or half a second. This level of analysis revealed that attention reacted to the stimulus, in particular involuntary attention to visual cues.

They suggested that this could be related to interest in content type of the stimulus being shown. Annie Lang (1990, 1993, 1994) followed on from Reeves's work into orienting response by examining heart rate as a measure of attention. Lang et al. found a corresponding relationship between heart rate and orienting response following on from a cut (1993). That is the longer the time from the cut the more the heart rate would slow.

Relationship between the Psychophysiological Processing of Media and Memory

Memory recall of political advertising content is a key aim of political advertising. As memory recall is associated with learning and attention, it is influential in the brand communication effects that are recognised as critical influencers on the consumer decision making process (Rossiter and Bellman 2005).

There are three main ways to measure recall, each related to a separate part of memory processing. Recognition recall measures how well a message was encoded. Cued recall measures how well a message was stored. Free recall measures how easily the message is accessed from memory (Potter and Bolls 2012).

The more arousing a message, the more likely that this message will be transferred into the memory of the viewer (Lang 2000, 2006). Therefore, this would tend to suggest that using negative scenes and images would help recall of information in an advertisement. This theory has been applied to social marketing, which is similar to political marketing,

where negative images are used in messages to increase arousal to, and memory for, the message.

Social marketing studies have examined the link between the use in social marketing communications of negative images and attitudes and arousal to messages. Hastings, Stead and Webb (2004) found that using negative images in messages may make them more memorable, but also contributed negative attitudes towards the advertisement and the sponsoring brand. This made it more difficult for the campaign to achieve long term objectives as target markets were not paying attention to the message to make it effective due to their attitudes towards it and secondary markets were developing a higher threshold level that would require new communication campaigns to be planned (Hastings, Stead and Webb 2004).

Lang's (2006) paper on designing an effective cancer campaign message considered the use of negative content and how this could be used to positively influence attention and memory levels of viewers. Whilst there was a likelihood of negative content creating a negative attitude towards the advertisement, it was also theorised that, to some viewers, the negative content may act as a motivator and influence their behaviour. Arousal could be further enhanced by the use of structural features that elicited higher levels of arousal and emotional response from viewers.

In political advertising, earlier studies have indicated that negative advertisements generate higher recall than positive advertisements (Roberts 1995; Shapiro and Rieger 1992; Lang 1991; Merritt 1984). In contrast, other political marketing research has drawn the opposite conclusion (Kaid, Chanslor and Hovind 1992; Kaid, Leland and Whitney 1992). More recently Bradley, Angelini and Lee (2007) have found higher recall of negative political advertising than positive messaging.

The effect of each type of advertisement can be contrasted with levels of consumer brand preference, attitude and recall to determine what type of televised advertisement has the greatest impact on consumers in a political context. This can identify the objectives, features and types of televised political advertising. The amount of information contained in each advertisement has been identified (Lang 1991) as an important factor in increasing the level of emotion in a consumer. As a result of the literature, it is projected that negative advertisements, with their greater cognitive commitments, will results in higher levels of recall than demonstrated by positive advertising, which is supported by the works of Rossiter and Bellman (2005), Lang

(1991), Brians and Wattenburg (1996) Roberts (1995) Shapiro and Rieger (1992) Lang (1991), Lemert et al. (1991), and Merritt (1984).

Phasic Responses and Attention Orientation

Lang (1990) identified three basic mechanisms of phasic attention change: orienting response (OR), startle response (SR), and defensive response (DR). Lang (1990) and Reeves et al. (1985) suggest that orientating response is the mechanism by which phasic attention varies in response to the structural features of television advertising as viewers use these features to orientate their focus of attention in a dynamic environment. Another effect of structural features of television is that they can elicit orienting responses in attentive viewers causing variation of attention levels within a viewing session. These orienting responses increase recall for information immediately following the OR eliciting structural feature. It is this effect that supports the theory of how structural features of television can guide viewer's attention (Lang 1990; Rothschild 1983).

Reeves et.al. (1985) also found evidence to support the proposition that structural features influence learning through the mechanism of an orienting response. Reeves found significant correlation between attention to structural features and recall for information immediately following the attention-capturing structural feature. This would support the hypothesis that duration of attention to structural features can help increase recall of the message and of the brand itself. Therefore, it can be theorised that, as ORs are part of a phasic response towards an advertisement, a recall of information in the message would help a political campaign that has only a short duration.

Orienting Response and Structural Features

Structural features of a television advertisement are those features that are not content related (Lang 1990). They can include commercial onset, movements, zooms, cuts and edits (Lang 1990). Categorisation of a television advertisement can be done across each of these structural features so that they can be examined together or as separate variables. In the case of this research, the number of structural features in one advertisement will be examined.

Orienting responses are elicited by a change in the environment (Lang 1990). In television, this means a stimulus, such as a structural feature that can change the

viewing environment and lead to a change in orienting response (Lang 1990). A structural change can also cue to the viewer that the viewing environment has just changed (Lang 1990). Television can achieve a change in orienting response by signal and by novel characteristics. Novel structural features can be features, such as an edit, cut, zoom or music onset or points of interest, such as an item in the message like a car (Lang 1990). Each point of interest needs to be at least six seconds apart in order to measure a cardiac orienting response (Lang 1990).

Arousal

Arousal is influenced by structural features and content of television. Arousal levels may vary briefly in response to a stimulus or arousal levels may increase or decrease consistently over a long period of time. Physiological arousal is measured by phasic changes reflected in oscillations of the level of arousal around a consistent baseline.

Arousal has been found to influence subsequent learning (Lang 1990). Arousal was thought to be a unitary concept, but is now seen as measured across multiple constructs and dimensions. Researchers vary on how it can be measured, being either two dimensions (physiological and cognitive) or three dimensions (behavioural, physiological and cognitive) (Lang 1990). Physiological dimensions are the dimensions best measured in relation to television advertising due to their ease of measurement.

Arousal can be influenced by levels of emotion in the content of television being viewed. Research on emotion consistently reduces the lists of feelings to two or three stable dimensions: direction, control, and arousal. As the processing of emotions contains a component of physiological arousal it is logical to suggest that emotional content in television should result in increased physiological arousal (Lang 1990, Potter and Bolls 2012).

Interaction of Attention and Arousal

Kahnemann (1973) argued that a relationship exists between a person's level of arousal and the level of attention or cognitive capacity that a person has available to process a stimulus. He argued that as arousal increases so does attention. Applying that to television it could be argued that an aroused viewer will have a higher level of attention than a non-aroused viewer. Emotion can increase attention to a message. Emotional responses to advertising stimulus improve memory by increasing arousal, which then increases cognitive capacity (Kahnemann 1973; Thorson, Reeves and Schleuder 1985).

Consequently, there should be an interaction between the effects of televised emotions and the effects of structural features on attention and arousal because any increase in arousal should result in an increase in phasic attention corresponding to a more vigorous orienting response. Therefore, the more emotional that the viewer finds an advertisement, the greater that they will be aroused by that advertisement. This increases attention to the advertisement and, therefore, recall for information. As arousal is a phasic response, this can be measured by skin conductance. Consequently, with regard to the combination of arousal and message recall, it would be expected that advertising with higher levels of arousal would have greater levels of recall. This leads to Hypothesis 2.

Hypothesis 2: Political advertisements that are more arousing will have higher rates of recall

Pacing

Commercial pacing or advertisement pacing, is defined as "the speed to which information is visually presented to the viewer for cognitive processing" (Bolls, Muehling and Yoon 2003). Pacing is determined by the number of cuts (camera angle/visual changes to a completely new scene) or edits (camera angle/visual changes within the same scene) used in a given advertisement. As each cut and edit introduces new information to the viewer, this means that this new information needs to be processed anew by the viewer. Cuts introduce more information than an edit as a cut introduces an entirely new scene. Fast-paced advertisements are those with 11 or more cuts in a 30 second period and slow-paced advertisements are those with three or less cuts in a 30 second period.

This relationship between pacing and recall has been investigated in psychophysiological research (Lang, Bolls and Potter 1999; Bolls, Muehling and Yoon 2003) that found that the faster a message is then the higher a viewer's arousal levels would be. Although both studies, reported that pacing also had an impact on the limited capacity for message processing (Lang et al. 1999; Lang 2000) for television messages. They found that the faster the message, the more information a viewer needed to process, which would increase arousal levels until such a time when the limit was reached, and then arousal levels would fall as viewers would no longer be able to process the primary stimulus of the television advertisement and would instead switch

to secondary tasks. This effect could be exacerbated by the content of the message itself and how much the information or arousal towards the content of the message might make the viewer allocate higher or lower levels of attention resources to processing.

From a content perspective prior research in psychophysiological research established that negative images attract higher levels of recall and arousal than other images. Newhagen and Reeves (1992) and Lang, Newhagen and Reeves (1996) found that negative images had higher levels of arousal and recall than other types of images. Similar results were found in political advertising in relation to recall. Lang's (1991) study into political advertising found that negative advertising had higher rates of recall than positive messages. Lau et al. (1999) also found that negative advertising had higher rates of recall than other types of political advertising.

These findings, if combined in a structure (pace) and content (valence) context, would mean fast negative political advertisements should have higher rates of recall than slow positive advertisements. This relationship has never been tested in political marketing before, which leads to the development of the third hypothesis.

Hypothesis 3: There will be a significant interaction between valence (negative/positive) and pace (slow/fast) such that fast negative advertisements will have a better recall than slow advertisements

Whilst the previous hypothesis examines recall in the context of valence and pace, to further understand how political advertising is impacting on the Rossiter and Bellman (2005) advertising model it is necessary to consider not only if the advertisement is being remembered, but if it is influencing the behaviour of the consumer through arousing an emotional response in them. This will be measured through changes to arousal levels in skin conductance levels, and then confirmed through the secondary measure of heart rate.

Prior research in psychophysiological research has established that negative images attract higher levels of recall and arousal than other images (Cacioppo, Tassinary and

Berntson 2007; Lang Newhagen and Reeves 1996; Newhagen and Reeves 1992). Similar results have been found in political advertising in relation to recall. Lang's (1991) study into political advertising found that negative advertising had higher rates of recall than positive messages, as did Bradley, Angelini and Lee (2007) who found higher recall rates for negative advertising than other forms of advertising. Interestingly, the Bradley, Angelini and Lee (2007) study only found marginal differences between negative and positive political advertising in relation to arousal. This was against what they expected to find based on prior studies in psychophysiology and other areas of communication studies, such as news reporting.

This could indicate that there is an underlying attitude to advertisement and brand effect that is influencing the results of arousal towards a message, suggesting that whilst negative advertisements might be being recalled, they are not being liked enough to influence the behaviour of consumers when they are first viewing a commercial. This is important as this arousal is necessary not just for behaviour change, but also for medium and long term message retrieval. If this is correct, then arousal is not occurring which would make running negative commercials ineffective, and could call into question running intensive advertising campaigns at the start of an election campaign as viewers would be unlikely to remember the content at the point of voting weeks later. It may also suggest that whilst a viewer can recall a message, they may see all political advertising as being unattractive and only recall messages that they find interesting, involving or relating to their own preferences for political policy product offerings of value. However, arousal is yet to be tested in a political advertising context which, therefore, leads to the development of the following hypothesis consistent with the findings of earlier research.

Hypothesis 4: There will be a significant interaction between valence (negative/positive) and arousal such that negative advertisements will have higher arousal than positive advertisements

If political advertisers were to focus on only one type of message content, such as positive, then understanding the role structure has on influencing arousal is important as it will identify a way, other than content, that arousal objectives could be met. It will also help understand the effect that role structure, in this case pacing, is having on the

perceived information density of political advertising and the processing capacity of viewers.

If a viewer feels they are being presented with too much information, that is, they are close to their message processing capacity, they will not allocate any processing resources to that message. Therefore, it will fail at being encoded and being able to influence behaviour unless the content is of interest to the viewer. In contrast, viewers presented with an amount of information that does not result in a sense of "being made to work" through a message may lead to higher levels of involvement and engagement with the message. This should translate into positive attitudes and liking towards the message and the brand which, in turn, influences purchase behaviour of political brands.

Prior work in psychophysiological research (Lang, Bolls and Potter 1999; Bolls, Muehling and Yoon 2003) shows that, in a commercial marketing sense, pace does influence arousal. These studies found that the faster the pace of a message the higher the arousal to that message until such time that the limited capacity for message processing was reached, when arousal would decline.

As Lang (1991) noted, political advertising is unique even in an integrated marketing communications context. As also noted above, there is some doubt over the certainty of any findings from other studies being applied in a political marketing context, therefore, examining the interaction between pace and arousal in a political advertising context will contribute knowledge to not only in political advertising, but also to the psychophysiological processing of media. Knowing this effect is important in understanding how political advertising is effective in a practical and theoretical context. This leads to the development of the following hypothesis.

Hypothesis 5: There will be a significant interaction between pace (slow/medium/fast) and arousal such that slower advertisements will have lower arousal than faster advertisements

Based on the previous hypothesis, if slow-paced advertisements have lower arousal rates than faster-paced advertisements, and if negative advertisements have higher arousal than positive messages, then if these two elements were combined there should be a significant interaction effect with arousal such that a fast-paced negative advertisement should have higher arousal levels than other types of messages. This is consistent with prior research findings of Lang, Bolls and Potter (1999) and Bolls, Muehling and Yoon (2003). They found that the faster the pace of a message the higher the arousal to that message. Findings by Newhagen and Reeves (1992) and Lang, Newhagen and Reeves (1996) also found that negative images and scenes created higher arousal levels than other types of messages.

However, as previously mentioned, the one factor that may affect these findings is attitude to the advertisement and brand. As prior research focused on commercial marketing, which has primarily favourable attitudes towards it, political advertising may provide either confirmation of these studies or demonstrate just how unique this area is from other areas of marketing. This leads to the development of the following hypothesis.

Hypothesis 6: There will be a significant interaction between pace (slow/medium/fast) and between valence (negative/positive) that will influence arousal such that slower positive advertisements will have lower arousal than faster negative advertisements.

One aim of this research was to investigate which promise of value, either negative or positive, had higher recall levels. However the ultimate objective of any political campaign is to get the vote, or to influence behaviour of the voter consumer so that they purchase the sponsored product. Whilst most existing research in political advertising has examined the strategic use of political advertising, or intended effects, as Baines et al. (2013) note, it is more important to understand actual effects upon the market.

From this perspective it is important to understand not just recall and arousal on a sample, but also how political brand preference influences arousal towards messages. Prior research in advertising found that brand preferences influence attention and recall to advertising (Campbell and Keller 2003; Tellis 1988). Although not specifically tested, these findings would indicate the presence of higher arousal levels towards messages from brands that the viewer preferred compared to other brands. Again it is important to note that this research was conducted on commercial marketing products with more positive attitudes towards the advertisement and brand, not political marketing products where this may not be the case. But, based on these findings, it

would be expected that if a consumer saw a promise of exchange from a brand they preferred that they should be more aroused and interested in that message than one from competing brands.

However, some prior studies in political advertising have found that viewing political advertisements increased information and knowledge of political brands by participants (Kaid, Fernandes and Painter 2011; Kaid et al. 2007; Rothschild and Ray 1974). There was also a finding by Kaid et al. (2007) that participants who had higher levels of enduring and situational involvement with television news also had higher interest in negative advertising. Negative advertising also had more likelihood of influencing their voting decision (Faber, Tims and Schmitt 1993). Faber and Storey (1984) also found that recall of information from a political advertisement was highest when the participant preferred that brand and that recall of any information was highly relation to attitude variables than any other types of variables including television exposure. Whilst not examining political advertising specifically, Gruszczynski et al. (2013) considered the link between political participation and skin conductance levels. They found that there was a correlation between people who had a higher baseline skin conductance level and higher levels of political involvement, and were more likely to be aroused by political communications and information. However, these constructs are yet to be examined in a political advertising context and there is no prior study on how party preference is related to arousal levels towards party political advertising. This leads to the development of the following hypothesis.

Hypothesis 7: Party preference, as measured by House of Representatives preference, will influence arousal to advertising such that messages from preferred brands will have higher rates of arousal

Conclusion

Most research to date in the area of political advertising has not used physiological measures to determine the actual emotional reaction by consumers to different types of political messages, or their impact upon the brands being attacked or sponsoring the message at the time of the message being shown.

This research will investigate this issue. It will also investigate if the emotional reactions of consumers to political advertising messages are harmful to stakeholders in the political process, not only those mentioned in the message. Finally this research will investigate what aspect of a political advertisement, either structure or content, is more effective in influencing consumer emotions and, therefore, their engagement with a political message. Table 2 (see following page) presents a summary of the variables to be used in this thesis, and how they will be measured and the data collected.

Table 2.3: Summary table of variables and scales that will be used to measure them in this thesis

Variable	Measured by?	Scale
Advertisement Recall	Free or unaided recall, aided or cued recall, and recognition recall	Word count for free and aided recall; identification of advertisement components for free and aided recall. Recognition recall is measured by a multiple-choice test on both verbal and non-verbal components of the advertisement.
Message Pacing	Number of cuts in a scene - slow (0-3 cuts), medium (4-10 cuts) and fast (11 or more cuts)	Arousal via skin conductance response and heart rate measures using a baseline measurement system.
Message Valence	Negative and positive content. Each category must make up the majority of the message by the accepted definition as such by existing literature in political advertising.	Arousal via skin conductance response and heart rate measures using a baseline measurement system.
Party preference	Measured by primary vote preference for the Australian House of Representatives	Post-test survey.
Arousal	Response to advertising stimuli	Skin conductance response and heart rate measures using a baseline measurement system.

CHAPTER 3 METHODOLOGY

Introduction

Chapter 3 overviews the methodology applied to the pilot and main study of this thesis. It overviews the methodological approaches used in prior research in the areas examined in the thesis and outlines the theoretical and practical background to each. Finally an overview of the methodology used is described and explained.

Prior Studies

Quantitative

Prior studies in political advertising, communication and psychophysiological studies in the processing of media have used the following quantitative methods. The two main approaches have been self-report surveys, and psychophysiological methods. The most common self-reported survey instruments in media processing have included the selfassessment manikin (Bradley, Angelini and Lee 2007; Lang, Potter and Bolls 1999) and the Geneva Emotion Wheel (Scherer 2005). In contrast, the psychophysiological methods of media processing have covered a wider range of methods, mechanisms and techniques such as: eye tracking and eye gaze duration (Pieters and Wedel 2004; Pieters, Warlop and Wedel 2002); eye startle reflex response (Bradley, Angelini and Lee 2007); heart rate changes (Lang 1990, 2000; Lang etal. 1993; Lang, Newhagen and Reeves 1996; Lang etal. 2000); Secondary Task Reaction Times (Bolls and Lang 2003; Lang, Dhillon and Dong 1995; Lang, Newhagen and Reeves 1996; Lang et.al. 2000; Thorson, Reeves and Schleuder 1985); brain imaging (Ambler, Joannides and Rose 2000); Electro Dermal Activity measures including Galvanic Skin Response (GSR) (Lang, Bolls and Potter 1999; Lang et.al. 2000; Potter, Bolls and Muehling 2003); Facial electromyography (EMG) (Bolls, Lang and Potter 2001; Hazlett and Hazlett 1999; Ohme et al. 2009), and electroencephalography (Ohme et al. 2009). Surveys dominated the earlier research in this area, more modern psychophysiological methods started to emerge in the late 1990s/early 2000s as a more accurate and reflective way of measuring response to media. Psychophysiological methods allow researchers to measure consumer responses in real time. Although these measures only capture primary emotional response, (type 1 emotions) in the words of Bellman (2007), they are opening up new research fields and opportunities previously inaccessible to researchers just relying on paper- based measures of emotion and responses to media.

As with studies of commercial advertising, political advertising quantitative studies have been divided into the survey instruments and psychophysiological measures. Kaid (2012) provides an overview of survey-led political advertising papers, but the work noted here is just a small selection covering the main survey and research approaches (Garramone 1985; Garramone et al. 1990; Kahn and Geer 1994; Lang in Biocca 1991; O'Cass 2002; Pinkleton 1997). Psychophysiological methods of media processing that include the "online worms" form of response to messages (Iyengar, Jackman and Hahn 2008), electromyography (Bradley, Angelini and Lee 2007), eye blink startle reflex (Bradley, Angelini and Lee 2007) and skin conductance response (Bradley, Angelini and Lee 2007; Gruszczynski et al. 2013). The one area of note is that the use of psychophysiological in political advertising has been restricted to just a few papers. This is most probably due to the lack of access to the resources and laboratories to carry out this type of research more, rather than any other factor, but it does highlight the potential research opportunities that now exist in the field if these methods can be utilised.

Quantitative studies in advertising relating to pace, arousal, recall and emotional response to messages are increasing in number as more and more studies start to use psychophysiological methods to undertake research examining the relationship between emotional responses to media and content and structural features. This list is not meant to be an exhaustive one, but does contain most of the relevant studies for this thesis. An excellent overview of papers in the field is found in Potter and Bolls's (2011), Psychophysiological Measurement and Meaning: Cognitive and Emotional Processing of Media.

- Recall and Memory (Bolls, Muehling and Yoon 2003; Jones, Pentecost and Requena 2005; Lang, Dhillon and Dong 1995; Lang, Newhagen and Reeves 1996; Lang et al. 1999, 2000, 2004, 2005; Singh, Rothschild and Churchill 1988)
- Pace (Bolls, Muehling and Yoon 2003; Geiger and Reeves 1993; Lang 1990, 1991; Lang et al. 1993; Lang, Bolls and Potter 1999; Lang et al. 2004; Lang et al. 2007; Lang et al. 2005; Lang et al. 2000; Yoon, Bolls and Muehling 1999)
- Arousal (Bolls, Muehling and Yoon 2003; Lang 1990, 1991, 2000; Lang,
 Dhillon and Dong 1995; Lang et al. 2004; Lang et al. 2007; Lang et al. 2000;

- Lang et al. 2005; Lang, Bolls and Potter 1999; Yoon, Bolls and Lang 1998; Yoon, Bolls and Muehling 1999)
- Emotional response studied in relation to one of the two prior topics (Bolls, Lang and Potter 2001; Bolls, Muehling and Yoon 2003; Hazlett and Hazlett 1999; Geiger and Reeves 1993; Lang 2000; Lang in Biocca 1991; Lang, Dhillon and Dong 1995; Lang et al. 1993; Lang, Newhagen and Reeves 1996; Lang et al. 2007; Lang et al. 2005; Lang et al. 2004; Yoon, Bolls and Lang 1998; Yoon, Bolls and Muehling 1999)

Qualitative

There have been far fewer qualitative methods which have been used in prior studies in this domain. Qualitative studies in political advertising have included interviews (Atkin and Heald 1976; Kates 1998; Valentino, Hutchings and Williams 2004; Wattenberg and Brians 1999) and focus groups (Kern and Just 1995). Qualitative studies in advertising relating to pace, arousal and emotional response have been based on interviews (Bardzell et al. 2008; Hernandez and Minor 2011; Micu and Plummer 2010). Most qualitative studies have used interviews or open ended questions to measure or examine the cognitive responses to media that aren't captured by the use of quantitative methods of research. It should be noted that some survey methods include the use of open ended questions, but are classified as quantitative as they primarily use these methods in the survey.

Choice of Qualitative or Quantitative

As with any research the question over what method to use will be decided by what research question needs to be solved. In this case, the research question is examining the relationship between the elements of pace, valence, arousal and emotional response in televised political advertising. As television advertising is dynamic a method needed to be selected that could capture the emotional and arousal responses to scene changes as they happened, without disturbing the viewer during the processing of the message, in order to keep the experiment as realistic as possible to how a viewer would watch a television program with the advertisements inserted into them. Therefore, this would make using a qualitative method impractical. Consistent with previous studies in the area and in order to answer the questions that this thesis posed a quantitative method was selected.

Pilot Study

The pilot test data collection was done to measure the emotional response, and respondent perceptions of the speed and valence of the commercials to be used in the main study. Although the pre-test study did not collect psychophysiology data due to the unavailability of biometric equipment, the survey instruments used would still give an indication as to the suitability of using the advertisements in the main study at the Interactive Television Research Institute in Perth, Western Australia. The purpose of this study was to investigate the emotional response to televised political advertisements that varied on structure (pace) and valence (content).

Method

The purpose of this study was to investigate the emotional response to televised political advertisements that varied on structure (pace) and valence (content). A pilot study was needed to ascertain which political advertisements aroused viewers and therefore what advertisements that would be selected for use in the main study and which ones would need to be replaced. As there were no psychophysiological measurement resources available to conduct the pre-test, a paper-based measure of arousal needed to be used that would enable the quick but effective measurement of media in the time frame of the one hour allocated for the pilot test.

Treatment Adverts

Using the study variables of valence (positive/negative) and structure (pace – slow/medium/fast) political advertisements were selected from a range of sources and saved to file. They were then assessed based on pace – slow (0-3 cuts), medium (4-10 cuts) and fast (11 or more cuts), which was consistent with previous research in the area (Bolls, Muehling and Yoon 2003; Lang et.al. 1999, 2004). Message content was classified consistent with prior research in political advertising literature on how to define content in a message (Hughes 2003; Kaid 2012; Jamieson, Waldman and Sherr 2000; Johnson-Cartee and Copeland 1991; Lau et al. 1999). After all messages were classified, a list was compiled and a sample of thirty political marketing advertisements were chosen to be cleaned and converted into the one file type, format and quality for further use in the study. This would ensure consistency for all messages when viewed and minimise any quality effects. Senior academics with experience in advertising and marketing communication were used as coders who viewed the messages and trialled the selected survey instruments in rating each advert. This narrowed the selection of

messages further to a sample of 20. As two of these were very similar in structure and content and from the same sponsor they were dropped from the sample for the pilot test.

The advertisements to be tested also needed to be reflective of the majority of current market choices consumers would be faced with if a Federal election were to be held tomorrow, therefore consistent with the brand choices a consumer would be able to make a purchase decision from. Not all political brands, especially minor brands, had made television messages so they could not be part of the study. However, at the time of the pilot study in May 2012 Labor, Liberals and Greens constituted 89% of first preference choices by consumers in the market (Newspoll n.d.). This meant that advertisements needed to be sourced from the Labor Party, Liberal Party, and Greens where possible. One independent message, from the member of the far North West Queensland House of Representatives electorate of Kenndey, Bob Katter, was also sourced, to provide a further reference point and to include a choice option for any consumer who didn't like either of the political parties chosen. As the party leaders at the 2010 election were still current leaders at the time of the study, this was not an issue. Only two advertisements needed to be sourced from before 2010, "Mr Howard" (slow negative, 2007) and "Kevin Rudd's Bag of Tricks and Excuses" (medium negative, 2007) as there were no other advertisements that matched this category from 2010. As not all political parties made advertisements that fitted into categories being examined, ads were chosen from an as even as number as possible across the major political parties.

Table 3.1: List of Advertisements Shown to Participants in Pilot Study

Ad Category	Number	Title
Fast Pos	1	Cadbury Dancing Shirts
Fast Pos	2	Nerf Blaster Ad
Fast Neg Pol	3	Same Old Labor Show
Fast Neg Pol	4	Tony the Dinosaur by Harrie, Aged 11 Years Old
Fast Neg Pol	5	You'll Keep Paying More under Labor
Fast Pos Pol	6	Bob Katter Your Force from The North

	1	Daisy Ad - Australian Greens Election Ad on Climate
Fast Pos Pol	7	Change
Fast Pos Pol	8	Take Action Australian Greens Election 07
Med Neg Pol	9	Kevin Rudd's Bag of Tricks and Excuses
Med Neg Pol	10	Tony Abbott Can't Manage the Economy
Med Neg Pol	11	Tony Abbott's Tax Hike.
Med Pos Pol	12	Greens (Gruen Nation by Republic of Everyone)
Med Pos Pol	13	Support Real Action with Tony Abbott
Med Pos Pol	14	Julia Gillard – Let's Move Australia Forward
Slow Neg Pol	15	Angry Anderson is fed up with Labor
Slow Neg Pol	16	Really Mr Howard
Slow Neg Pol	17	Taking Australia Backwards
Slow Pos Pol	18	Double Value Voting
Slow Pos Pol	19	Household Assistance Package – Families
Slow Pos Pol	20	Stand Up for Real Action 2

A filler advertisement (Cadbury) that was fast-paced positive commercial was screened at the beginning of the survey as a sample advertisement to allow participants to familiarise themselves with the procedure, and another fast-paced filler advertisement (Nerf) was shown at the end of the study to signify the end of the study and to help clear participants memory before filling out a very brief post-test survey. All advertisements had been screened on prime time, mainstream television in Australia. They have been double checked against the Advertising Standards Board and the Australian Communications and Media Authority to ensure that no complaints were lodged against these commercials to confirm with ethical policies.

Pacing

Advertisement pacing, is defined as "the speed to which information is visually presented to the viewer for cognitive processing" (Bolls et al. 2003, p18). Pacing is determined by the number of cuts (camera angle/visual changes to a completely new scene) or edits (camera angle/visual changes within the same scene) used in a given advertisement (Bolls et al. 2003; Lang et al 1999, 2004). As each cut and edit introduces new information to the viewer, this means that this new information needs to be processed anew by the viewer. Cuts introduce more information than an edit as a cut introduces an entirely new scene (Bolls et al. 2003; Lang et al 1999, 2004). For the purpose of the research in this thesis and consistent with prior research in the area, fast-paced advertisements are those with 11 or more cuts in a 30 second period and slow-paced advertisements are those with three or less cuts in a 30 second period (Bolls et al. 2003; Lang et al 1999, 2004).

As cuts introduce new information to be processed by a viewer, the more cuts there are in a message, the more information that must be processed and the more this places demands on the limited message processing resources of a viewer (Lang et al. 2004). This, in turn, creates higher arousal until a viewer's capacity for message processing is reached and then there will be a drop off in attention towards a message as resources are allocated away from the primary task of message processing to other tasks (Lang et al. 2004). There is no way at present of calculating when this may occur in a viewer, and different factors, for example, involvement with the category, can alter the general effect to make a viewer pay more attention to one advertisement over the others in a break. There is no doubt that from the findings of prior research the use of many fastpaced advertisements helps speed this process up, whereas the use of slower-paced advertisements can slow the process down (Bolls et al. 2003; Lang et al 1999, 2004). This is why understanding the effect of pace on messages in a particular product category, in this case political marketing, is important; if someone can be aroused by a message then they will pay more attention to it, therefore, be more likely to have that enter their memory and then if they have the right attitude to the message they will develop a liking to the message content so that it might influence their purchase intention or brand preference.

Table 3.2: Advertisements per Category

	Slow (3 or less cuts)	Medium (4-10 cuts)	Fast (11 cuts or more)		
Negative	3	3	3		
Positive	3	3	3		

Content

Content type can be defined as whether or not the advertisement is positive, negative or neutral. Advertisement content that is positive will present only positive information, images and other types of content. This is the case for any message, political or not. For example, an advertisement for a soft drink, such as, Coke will be full of positive content such as happy smiling people or tropical beaches, as will a political message for a brand that is full of smiling people talking about how great a brand's policy is for an issue.

An advertisement that is negative will contain information, images of other content that is negative or perceived to be so. For example, a political advertisement that attacks another political party is defined as a negative advertisement. Some social marketing campaign advertisements, such as the famous 1987 Australian "Grim Reaper" AIDS, commercial would also be classified as negative due to its content and structural features. An advertisement that is neither positive nor negative is defined as being neutral.

Table 3.3: List of Advertisements Shown to Participants - Per Political Party

Labor	Liberal	Greens	Independent
2	1		
1	1	1	
2	1		
1	1	1	
	2	2 1	2 1 1 1

Fast Negative	1	2			
Fast Positive			2	1	
Total	7	6	4	1	

Twenty adverts were prepared for the sample. As the pilot study data collection was conducted over three days, the order of the political advertising content was randomized between each day, with only the training advertisement (Cadbury), and the calibration advertisement (Nerf) remaining in constant position. The order of the advertisements in each session are outlined in Table 3.4.

Table 3.4: Pilot Test Advertisement

Orde	Study Order 1	Study Order 2	Study Order 3		
2	Fast Neg Pol-3-Tony the Dinosaur by Harrie, Aged 11 Years Old	Slow Pos Pol-17-Double Value Voting	Fast Pos Pol-7-Take Action Australian Greens Election 07		
3	Slow Neg Pol-15-Really Mr Howard	Fast Pos Pol-5-Bob Katter Your Force from the North	Med Neg Pol-8-Kevin Rudd's Bag of Tricks and Excuses		
4	Fast Pos Pol-5-Bob Katter Your Force from the North	Slow Pos Pol-19-Stand Up for Real Action 2	Fast Neg Pol-3-Tony the Dinosaur by Harrie, Aged 11 Years Old		
5	Med Pos Pol-11-Greens (Gruen Nation by Republic of Everyone)	Slow Pos Pol-18-Household Assistance Package - Families	Slow Pos Pol-19-Stand Up for Real Action 2		
6	Slow Pos Pol-18-Household Assistance Package - Families	Med Pos Pol-13-Julia Gillard – Let's move Australia forward	Med Neg Pol-9-Tony Abbott Can't Manage the Economy		
7	Slow Pos Pol-19-Stand Up for Real Action 2	Fast Pos Pol-6-Daisy Ad - Australian Greens Election Ad on Climate Change	Slow Neg Pol-16-Taking Australia Backwards		
8	Med Pos Pol-12-Support Real Action with Tony Abbott	Med Neg Pol-9-Tony Abbott Can't Manage the Economy	Slow Pos Pol-17-Double Value Voting		
9	Fast Pos Pol-7-Take Action Australian Greens Election 07	Med Pos Pol-12-Support Real Action with Tony Abbott	Med Pos Pol-13-Julia Gillard – Let's Move Australia Forward		
10	Slow Pos Pol-17-Double Value Voting	Fast Pos Pol-7-Take Action Australian Greens Election 07	Slow Neg Pol-15-Really Mr Howard		
11	Fast Pos Pol-6-Daisy Ad - Australian Greens Election	Med Neg Pol-10-Tony Abbott's Tax Hike	Med Neg Pol-10-Tony Abbott's Tax Hike		

	Ad on Climate Change		
12	Med Neg Pol-8-Kevin Rudd's Bag of Tricks and Excuses	Fast Neg Pol-4-You'll Keep Paying More under Labor	Fast Neg Pol-2-Same Old Labor Show
13	Fast Neg Pol-4-You'll Keep Paying More under Labor	Slow Neg Pol-16-Taking Australia Backwards	Med Pos Pol-12-Support Real Action with Tony Abbott
14	Med Neg Pol-9-Tony Abbott Can't Manage the Economy	Med Pos Pol-11-Greens (Gruen Nation by Republic of Everyone)	Med Pos Pol-11- Greens (Gruen Nation by Republic of Everyone)
15	Slow Neg Pol-14-Angry Anderson is Fed Up with Labor	Med Neg Pol-8-Kevin Rudd's Bag of Tricks and Excuses	Fast Neg Pol-4-You'll Keep Paying More under Labor
16	Slow Neg Pol-16-Taking Australia Backwards	Fast Neg Pol-2-Same Old Labor Show	Slow Pos Pol-18-Household Assistance Package - Families
17	Fast Neg Pol-2-Same Old Labor Show	Fast Neg Pol-3-Tony the Dinosaur by Harrie, Aged 11 Years Old	Fast Pos Pol-5-Bob Katter Your Force from the North
18	Med Neg Pol-10-Tony Abbott's Tax Hike	Slow Neg Pol-14-Angry Anderson is Fed Up with Labor	Slow Neg Pol-14-Angry Anderson is Fed Up with Labor
19	Med Pos Pol-13-Julia Gillard - Let's Move Australia forward	Slow Neg Pol-15-Really Mr Howard	Fast Pos Pol-6-Daisy Ad - Australian Greens Election Ad on Climate Change

Sample

Undergraduate units have been selected for the research due to cost and access reasons. The research was conducted in voluntary tutorials. Participation in the research did not form any part of any assessment item for any of the units, and students were notified on the ANU's learning management system (Wattle) at least a week ahead of time that the tutorial class would be used for the data collection. The participants chosen were undergraduate students studying selected second and third year marketing courses at the ANU.

Ethics

Ethics approval was sought and granted from the ANU Human Research Ethics Committee (2012-459) to undertake the survey.

Instrument

The survey instrument consisted of 26 pages, including participant information sheet, instructions on the use of the survey instrument, a psychographic profile section, 20 advertising response pages, and a post-test political engagement profile and survey. The first page of the survey consisted of a four scales – two psychographic measures, and demographic data. Psychographic measures collected were the Donthu and Gilliland (1996) risk aversion scale which functioned as a proxy measure of conservative outlook and the Lennox and Wolfe's (1984) self-monitoring scale to assess for levels of self-regulation in the presence of others. Voter experience was captured through two binary items of "I am registered to vote for the ACT Elections" and "I have voted in a previous Australian election". Demographics were restricted to age and gender to avoid identification of the respondents in the cohort, as the inclusion of nationality alongside the two other descriptors may have resulted in identification of respondents.

An additional page of attitudinal measures were collected at the end of the survey to assess political engagement. These items were Pinkleton, Um, and Austin (2002) "Attitude towards Voting", "Voting Efficacy" and "Attitude toward political advertising". O'Cass's (2002) voter confidence scale was used as a dummy variable to disguise the nature of the scale's data collection. These measures were used to identify the level of political engagement amongst the respondents.

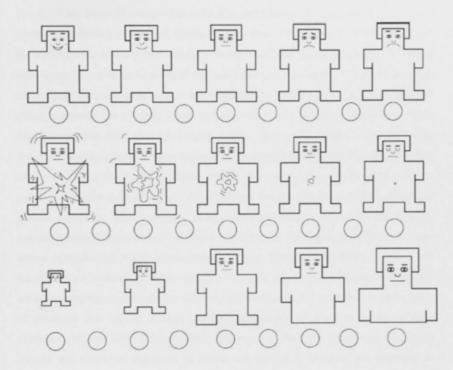
Advertising Response Page

The main body of the survey consisted of twenty pages of the "Responses to Advertisement" study, which used four items – the Self-Assessment Manikin, the Geneva Emotion Wheel, and two single item measures of Speed and Content.

Self-Assessment Manikin

As a multi-media laboratory is required to effectively measure psychophysiological measures, and none was available at the researcher's location, this meant that any pretest needed to exclude these types of measures yet still account for emotions in advertising. The main method that has been used by researchers in this field to overcome this limitation yet still relatively accurately measure emotion in both types of advertising has been to use the Self-Assessment Manikin method (Morris 1995). The Self-Assessment Manikin, or SAM, is shown in Figure 3.1. The Self-Assessment Manikin is a non-gender specific graphic character that measures the primary emotions of pleasure, arousal and dominance, which are the constructs of type 1 emotion (Russell and Mehrabian 1977; Lang 1985; Rossiter and Bellman 2005). As these types of emotions are always present in individuals, regardless of environment, context or culture, but previously required lengthy verbal or non-verbal measurement techniques (Morris 1995) to measure emotional response to stimuli, the use of a graphic manikin overcame these limitations and allowed for a speedy response to stimuli, enabling its use in measuring emotional responses to advertising. As some respondents struggled to understand what each character represented, some surveys have been modified to add words for each end of the scale on each row. The top row of figure 3.1 is for pleasure, the middle for arousal and the third row is dominance. Whilst pleasure looks selfexplanatory, the character on the far left hand side of the middle row would be indicating someone who is feeling very aroused, hence why there is an explosion symbol inside the character to indicate excitement. The bottom row might also be hard for some to understand at first glance. The far left hand side character is small because they are feeling very dominated, but the far right hand character is feeling dominating.

Figure 3.1: The Self-Assessment Manikin (Bradley and Lang 1994; Morris 1995)



There are only these three rows of manikins, with five manikins on each row, and there has been little modification to these characters since Bradley and Lang (1994) first developed the scale. The first row of manikins comprises smiling and happy manikins to unhappy and sad manikins, representing pleasure. The second row of manikins, representing arousal, shows powerful manikins with a big spark inside for high arousal, to ones with a very small spark for low arousal. The last row of manikins, representing dominance, shows a small-sized manikin for submission to a very large-sized manikin representing power and authority. All manikins are arrayed on a nine point scale, although five or seven point scales have also been used but most studies use the nine point scale to try and capture as accurate emotional response as possible.

Correlations from the original Lang (1985) study using the manikins were all strong; pleasure was .94, arousal .94 and dominance .66 (Guthrie 2009). Similar scores have been recorded since this original study by others who have used the SAM (Morris

1995). SAM has been modified across the other scales and types of emotion as well, producing similar scores on correlation (Morris 1995).

The SAM has many advantages that make it an appropriate choice to use in a pre-test of dynamic advertising of this type. Firstly, using a graphic character in a visual test assists the respondent to identify their emotions more effectively and more quickly than using other types of verbal or non-verbal measures (Lang 1985; Morris 1995). This means that a respondent can look at more ads whilst minimising fatigue, and therefore more closely resemble the context, speed and environment in which a respondent views advertisements in their own lives (Lang 1985). Due to the simplistic nature of the manikins most people can readily understand the emotional meaning of each, regardless of age or culture (Lang 1985; Morris 1995). This enables SAM to be used across a range of respondent backgrounds and, therefore, results will more closely reflect the general population than perhaps a sample population. SAM allows for the specific emotional measurement of each advertisement shown to the respondent and can be used across dynamic and static advertisements (Lang 1985; Morris 1995). The SAM measures type 1 emotions, those that do not require any cognitive assessment as they are immediate reactions to stimuli, but does not measure type 2 emotions, or those types of emotions that require a more cognitive assessment of them to recognise their existence (Morris 1995, Scherer 2005). However as the pilot study was examining arousal and emotional responses to media and needed to measure this response as quickly as possible after viewing, and due to its use in prior studies in the area, the SAM was chosen to be used in the pilot study.

Geneva Emotion Wheel

It was important to try and measure type 2 emotions in a quick method using a similar method to SAM so as to capture any emotional response that the SAM missed or did not include. The measures which can do this, meet the criteria of time in the study, and had widespread acceptance through use in similar studies narrowed the choice down to the Geneva Emotion Wheel.

The Geneva Emotion Wheel (GEW) was developed by Scherer (2005) to measure emotional responses to stimuli. More importantly it is able to measure the intensity of the emotion felt, whereas the SAM is not able to do this (Scherer, 2005). The dimensions used by the SAM can also be ambiguous to some respondents, something the GEW has been designed to avoid as far as possible. For example, an intensely

fearful and an intensely angry person would be both likely to indicate negative high arousal on the SAM, which does not reflect an accurate representation of the emotions being experienced. Scherer developed the wheel around his definition of emotion:

"...an episode of interrelated, synchronized changes in the states of all or most of the five organismic subsystems in response to the evaluation of an external or internal stimulus event as relevant to major concerns of the organism" (Scherer 1987, 2001).

Scherer sees feelings as being the reflection of the totality felt by a person in response to a stimulus, which may not encapsulate the individual emotions felt by a person. Whilst the SAM measures only type 1 emotions, the GEW can measure both type 1 and type 2 emotions, though based on Scherer's definition of these types of emotions being categorised into what he refers to as utilitarian emotions and aesthetic emotions. Utilitarian emotions, those defined more broadly as type 1 by Rossiter and Bellman (2009), are those that are used to adapt to events that can affect a person's emotional and physical well-being whereas aesthetic emotions, type 2, are those that are focused more on the appreciation of the environment by an individual, for example looking at works of art or listening to music in a relaxing place.

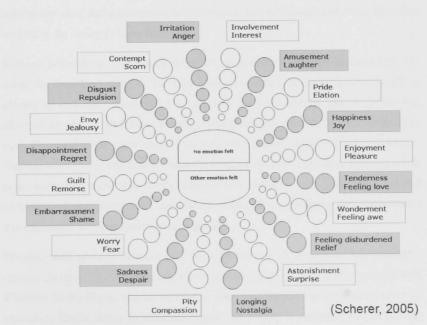


Figure 3.2: Geneva Emotion Wheel

The spokes of the GEW relate each to the family of emotions, with a modified five point scale used to measure level of intensity of that emotion. The wheel is based on a map of Russell's (1983) emotion circumplex in two-dimensional valence by activity/arousal space overlapped with 80 common emotion terms (Scherer 2005).

Single Item Measures

Two single item measures of speed and content were introduced to affirm the coding of the adverts as fast-, medium- or slow-paced, and positive, negative or neutral content. The speed scale used was a 9 point Likert scale, with 1-3 being slow, 4-6 medium and 7-9 fast. The content scale also used a 9 point Likert scale, with 1-3 being negative, 4-6 being neither positive nor negative, and 7-9 being positive. These single item measures were developed for the study and were created to measure the perception of valence and pace by the subjects. A nine item scale approach was used to capture, as accurately as possible, the pace and valence of the message as perceived by the subject.

Pilot Study Procedure

For the pilot study 75 undergraduate students of a third year undergraduate marketing research course at an Australian Capital Territory (ACT) university were approached to take part. The research would take place across all one hour long tutorial classes to be held in one week. All students were informed orally and in writing through the information sheet that participation in the research was voluntarily and at any time they could stop the survey or leave the room.

Students undertaking the research were not offered any credit any remuneration for doing so, but were able to see how marketing research could be conducted in advertising and communications. Students were informed verbally and in writing that return of the survey will indicate that they have given their consent for their results to be used for research purposes only. This was also printed at the end of the survey. Students were free at any time to leave the research or could raise their hands or speak to the researcher at any time to ask questions or express concerns. This researcher had no teaching commitments with any students during that semester or after the research was completed to prevent any bias in responses.

The study took place in tutorial rooms that held between 15-20 students each, but had a capacity of up to 30. All rooms had the same technology – a Dell PC equipped with Windows Media Player, and the same projector screen size. All advertisements were 30 seconds in length, shown in Windows Movie File format in 480p quality, and all with

the same sound levels to ensure consistency across the messages. No other alterations were made to the messages. Students were only able to attend one tutorial per week, and the tutor of the class was present at the start of every tutorial to ensure no student attended a session more than once, leaving immediately the study commenced.

The advertisement presentation order was randomised between one of three orders for the five classes that were part of the study. Once all students were seated, they were given the surveys, which contained an information sheet, instructions, the survey itself, and a post-test survey and thank you and further information page. Ten minutes were allocated to sit all students, information and instructions, and then commence the study. Students were shown the first sample advertisement, always numbered 1, and then given 60 seconds to complete the first survey page. At the end of 55 seconds the next advertisement would automatically start with a verbal announcement of the number of the next advertisement followed by a black screen coming on the screen with a number of the advertisement which students would write down in the top right hand corner of the page and then the advertisement would start. This was repeated until the end of the advertisements, and then subjects completed a short 5-10 minute post-test survey, by the end of which usually the time was near at an end for the 60 minutes allocated tutorial time.

Completed surveys were then collected and the data in each was manually entered into an Excel spread sheet, and then double checked by another coder for errors, consistency and accuracy, before being analysed using Statistical Package for the Social Sciences (SPSS).

Results of the Pilot Test

The following section outlines the results of the pilot study data. The cohort consisted of 71 respondents, with 25 male and 33 female students, and an additional 13 students who did not identify their gender. Ages ranged from 19 to 32, with a mean age of 22 (sd 2.36). Voting experience was divided with 34 (47.9%) indicating that they had voted in a previous election, and 21 (29.6%) indicating that they were registered as voters for the ACT local elections.

Psychographic Profile

Two psychographic measures were captured to determine if the cohort was sensitive to risk and self-monitoring which may have influenced the responses to the data collection exercise. Individual items for risk aversion are presented in Table 3.5.

Table 3.5: Risk Aversion

	N	Mean	Std. Deviation
RISK1: I would rather be safe than sorry	59	3.59	1.036
RISK2: I want to be sure before I purchase anything	58	4.02	.946
RISK3: I avoid risky things	59	3.03	1.017
Valid N (listwise)	58		

Individually, the risk items demonstrate the cohort is slightly above average for financial risk (RISK2), average for general risk engagement (RISK3) and slightly above average for risk regret (RISK1). Risk aversion should not be an influencing factor in the cohort's response to the advertisement copy.

Self-monitoring was examined to determine if the nature of the data collection – undertaken in a group environment could be influenced by the cohort's proximity to each other. Data was collected using the Lennox and Wolfe (1994) and outlined in Table 3.6.

Table 3.6: Self-Moderation Scale

	N	Mean	Std. Deviation
SELF1: It is my feeling that if everyone else in a group is behaving in a certain manner, this must be the proper way to behave.	58	2.48	.995
SELF2: At parties I usually try to behave in a manner that makes me fit in.	57	3.28	1.031
SELF3: When I am uncertain how to act in a social situation, I look to the behaviour of others for cues	58	3.57	.920

SELF4: I try to pay attention to the reactions of others to my behaviour in order to avoid being out of place.	58	3.33	.998
SELF5: I tend to pay attention to what others are wearing	59	3.53	1.056
SELF6: It's important to me to fit into the group I'm with.	59	3.49	.935
SELF7: My behaviour often depends on how I feel others wish me to behave	57	2.72	1.098
Self Moderation Total	55	3.1662	.63518
Valid N (listwise)	55		

The summed item Self-Moderation scale was tested using the Shapiro-Wilk normality test and found to be non-significant. Therefore, with a normal distribution of attention to others in the room, it is unlikely that the nature of the group based assessment of the adverts influenced responses.

Political Engagement

Pinkleton, Um, and Austin (2002) study on the effects of negative political advertising on political decision making was used to ascertain baseline measures of political engagement. Three measures from their study (efficacy, negativism, and voter engagement) were used to assess the student's overall engagement with political activity and political advertising. The scales are reported in Table 3.7.

Table 3.7: Political Engagement

	N	Mean	Std. Deviation
Voter efficacy			
VoteEfficacy1: Voting is an effective way to influence what the government does.	64	3.61	1.078
VoteEfficacy2: I have a real say in what the government does	64	2.75	1.113

VoteEfficacy3: My vote makes a difference	63	3.00	1.191
Alpha .673			
Pinkleton, Um, and Austin (2002): .77; .86			
Attitude Toward Political Advertising*			3333
PolAdvert1: Political campaigns are too mean-spirited	64	3.70	1.064
PolAdvert2: It seems like political ads are against something more than they are for something.	64	4.27	.740
PolAdvert3: Political campaigns are too negative	64	3.73	1.116
PolAdvert4: Political advertising is too negative.	64	3.77	1.080
Alpha: 817 Pinkleton, Um, and Austin (2002): .76; .88			
Attitude towards Voting			10-3-5
VoteAttitude1: Voting in each election is a high priority for me	64	2.75	1.285
VoteAttitude2: Voting in elections is important to me	64	3.02	1.253
VoteAttitude3: I would feel guilty if I didn't vote.	64	2.91	1.466
VoteAttitude4: I like to vote.	63	2.83	1.238
Alpha: .894			
Pinkleton, Um, and Austin (2002) study: .93; .94			

Source: Adapted from Pinkleton, Um, and Austin (2002)

Tests of normality of distribution using the Shapiro-Wilk test indicates that voter efficacy (.955, df=63, p=.022), attitudes towards political advertising (.951, df=64. P=.013), attitudes toward voting (.956, df=63, p=.025) are not normally distributed.

Individual Advertisement Results

Twenty advertisements were measured in the pilot study, on two seven item scales measuring speed (1=slow, 7=fast) and content (1=negative, 7 positive). Of the advertisements measured, twelve advertisements matched the predictions for speed and content. Table 3.8 outlines the summary of the results.

Data reporting is structured as follows for each advertisement. Each advertisement is overviewed with a brief description of the advertisement copy and content and an illustration of approximately 30 still frame thumbnails from the advertisement generated by Media Player Classic – Home Cinema (http://mpc-hc.org/).

Results of the pilot study data are presented for each advertisement in terms of the measures of speed and content against the pre-coded predictions. The predictions were based on the means of the pre-coders scores for each advertisement.

The SAM measures of pleasure, arousal and dominance, which are used to measure the intensity of the response to the advertising stimulus, are also reported. Reporting of the results from the Geneva Emotional Wheel are limited to the primary emotions (joy, sadness, anger, fear, disgust and surprise) for their role in confirming the perception of the experience of the advertisement as a positive or negative emotional encounter (Li and Mao 2012). In addition, the results of the GEW main six emotions are presented in rank order of intensity, based on the data reporting method of Roidl et al (2013), who used this approach to prioritise the emotional responses to stimuli. The speed scale used was a 9 point Likert scale, with 1-3 being slow, 4-6 medium and 7-9 fast. The content scale also used a 9 point Likert scale, with 1-3 being negative, 4-6 being neither positive nor negative, and 7-9 being positive. The predicted outcomes are contrasted with the recorded means from the study to highlight any significant findings.

Finally, the section notes whether the advertisement will be included in the data collection for the hypothesis testing based on

Table 3.8: Summary Table of 20 adverts

Ad	Title	Author	Predicted	Recorded	SD	n	Predicted	Recorded	SD	n
	Top low of the Edu	A.S.O.S.	Speed	Mean			content	Mean	1.69	
1	Training Ad - Cadbury Dancing	Commercial	Fast	5.9	1.6	60	Positive	6.53	1.90	60
	Clothes Official TV Ad						Par Line	4.3	110	-01
2	Same Old Labor Show	Liberal Party	Fast	6.4	1.4	64	Negative	4.14	2.05	64
3	Tony the Dinosaur by Harrie, Aged 11 Years Old	Australian Labor Party	Fast	4.2	2.3	61	Negative	4.36	1.86	61
4	You'll Keep Paying More under Labor	Liberal National Party	Fast	4.5	1.7	64	Negative	3.23	1.78	64
5	Bob Katter Your Force from the North	Independent	Fast	6.4	1.7	62	Positive	5.64	1.92	61
6	Daisy Ad - Australian Greens	Greens	Fast	4.3	1.9	64	Positive	3.34	2.15	64
7	Take Action Australian Greens Election 07	Greens	Fast	5.2	1.8	63	Positive	6.08	1.88	62
8	Kevin Rudd's Bag of Tricks and Excuses	Liberal National Party	Medium	6.8	1.4	64	Negative	4.09	2.36	64

9	Tony Abbott Can't Manage the Economy	Australian Labor Party	Medium	5.3	1.4	64	Negative	3.50	1.94	64
10	Tony Abbott's Tax Hike.	Australian Labor Party	Medium	4.4	1.5	64	Negative	3.00	1.69	64
11	Julia Gillard – Let's Move Australia Forward	Australian Labor Party	Medium	4.8	1.6	64	Positive	6.75	1.85	64
12	Support Real Action with Tony Abbott	Liberal National Party	Medium	4.6	1.6	62	Positive	4.95	1.82	62
13	Greens (Gruen Nation by Republic of Everyone)	Greens	Medium	4.0	1.7	62	Positive	6.27	2.27	63
14	Angry Anderson is Fed Up with Labor	Liberal National Party	Slow	4.1	1.4	64	Negative	3.56	1.79	64
15	Really Mr Howard	Australian Labor Party	Slow	4.3	1.6	51	Negative	3.37	1.70	51
16	Taking Australia Backwards	Australian Labor Party	Slow	4.2	1.7	63	Negative	3.19	1.70	63
17	Double Value Voting	Greens	Slow	4.3	1.7	64	Positive	5.69	1.71	64
18	Household Assistance Package - Families	Government	Slow	6.0	1.7	60	Positive	6.92	1.46	60

19	Stand up for Real Action 2	Liberal National Party	Slow	5.0	1.6	62	Positive	5.20	2.10	61
20	Nerf Ad - Nerf N-Strike Elite Rampage Retaliator	Commercial	Fast	6.8	1.6	53	Positive	6.58	1.91	53

Advertisement 1 Training Ad - Cadbury Dancing Clothes Official TV Ad

This advertisement was initially shown on TV during the period leading up to the London Olympics in 2012. It portrays a men's smart casual shirt dancing with a suit and other clothes to the tune of "Whoomp There It Is" by the group Tag Team. The advertisement ends with a screen shot of Cadbury Chocolate.

Figure 3.3.1: Cadbury Dancing Clothes Official TV Ad



Table 3.9: Pilot Study Results - Cadbury Dancing Clothes

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
1	Fast	5.9	1.6	60	Positive	6.53	1.90	60	Match on speed and content

Table 3.10: Self-Assessment Manikin Results - Cadbury Dancing Clothes

	N	Mean	Std. Deviation
01SAE1 Pleasure	62	3.27	1.462
01SAE2 Arousal	62	4.55	2.288
01SAE3 Dominance	61	4.92	1.453

Table 3.11: Geneva Emotion Wheel Result (Rank Order) – Cadbury Dancing Clothes

Item	N	Mean	Std. Deviation
01GEW04 Happiness-Joy	38	3.53	.979
01GEW09 Astonishment-Surprise	24	2.79	1.179
01GEW20 Irritation-Anger	12	1.83	1.528
01GEW18 Disgust-Repulsion	8	1.63	1.408
01GEW12 Sadness-Despair	9	1.33	.707
01GEW13 Worry-Fear	7	1.00	.000

The findings of the scale items for the speed and content of the advertisment confirm the predicted classification of each based on existing research findings. The self-assessment manikin (SAM) results show that whilst most viewers did not find the message pleasurable to watch, it did have moderately high levels of arousal and moderately high levels of feeling as though they felt in control or dominating in the

message. The GEW findings show the contrast in findings between using the SAM to measure emotional intensity.

As can be seen the largest emotion recorded was happiness-joy, with the intensity of this emotion being on average at a moderate high level. Astonishment-surprise was the next highest number at 24 out of 62 participants for the survey recording that they felt this emotion in a moderate way. Noticeably a small portion of participants noted that they felt a small amount of intensity of irritation-anger, disgust-repulsion and sadness-despair when watching this advertisement.

Advertisement 2 Same Old Labor Show

This Liberal Party advertisement was shown at the 2010 Australian Federal Election. It takes the form of a parody comic advertisement and compares then leader Julia Gillard to her predecessor Kevin Rudd, saying both are lemons. Other notable Labor leaders, such as Treasurer Wayne Swan and then Environment Minister Peter Garrett are shown in the background as part of the Labor "show". The advertisement uses background music of an instrumental version of the "Time Warp" from *The Rocky Horror Show*.

Figure 3.3.2: Same Old Labor Show



Table 3.12: Pilot Study Results – Same Old Labor Show

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
2	Fast	6.4	1.4	64	Negative	4.14	2.05	64	Match for speed, does not match for content

Table 3.13: Self-Assessment Manikin Results – Same Old Labor Show

	N	Mean	Std. Deviation
02SAE1 Pleasure	64	3.81	1.670
02SAE2 Arousal	64	4.34	1.986
02SAE3 Dominance	63	5.13	1.709

Table 3.14: Geneva Emotion Wheel Result (Rank Order) - Same Old Labor Show

Item	N	Mean	Std. Deviation
02GEW04 Happiness-Joy	20	3.15	1.089
02GEW09 Astonishment-Surprise	22	2.77	1.232

02GEW20 Irritation-Anger	16	2.75	1.438
02GEW18 Disgust-Repulsion	15	2.73	1.486
02GEW12 Sadness-Despair	11	2.73	1.348
02GEW13 Worry-Fear	12	2.25	.965

The viewers' ratings on the self-report scale items on pace and valence matched what was predicted for the advertisement. The SAM measures showed that there was a neutral reading for pleasure which, considering the message is negative, is an important finding to note. There were moderate levels of arousal, but moderate-high levels of dominance, which meant that participants did not feel as though the advertisement was dominating them – another important finding with this negative message.

However, the GEW findings reveal that even though this message was humorous most participants did not report high levels of happiness-joy when watching this message, perhaps indicating the effect of pre-existing attitudes towards the advertisement and brand. Some respondents also felt a medium level of astonishment-surprise emotional intensity, which is also interesting considering the humorous appeal of the message. The other interesting finding was that the levels of negative emotions participants reported were low on intensity and number. Again this is an important finding as it indicates that the appeal type of the message can be negated in the minds of the viewers by using a very positive message appeal, such as humour. However, the use of humour needs to be cautioned as once fatigue effects start to be noticed by the target market then this negation effect is likely to be reduced dramatically.

Advertisement 3 Tony the Dinosaur by Harrie, Aged 11 Years Old

"Tony the Dinosaur" is a Labor Party advertisement that purports to have been drawn by an 11 year old called Harrie. Harrie draws Tony Abbott as an evil green dinosaur that is trying to dig up Work Choices, a Liberal Party industrial relations policy from the 2007 Australian Federal election that was seen as a significant reason why Labor won. Julia Gillard is depicted as an angel who comes down and kills both the dinosaur and Work Choices and restores happiness to the world.

Figure 3.3.3: Tony the Dinosaur by Harrie, aged 11 years old.

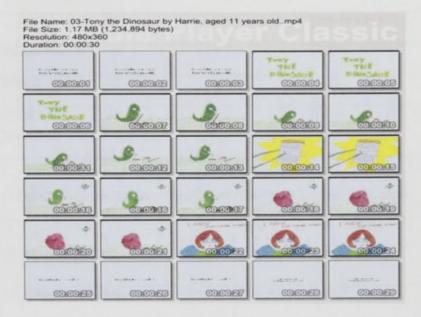


Table 3.15: Pilot Study Results - Tony the Dinosaur

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
3	Fast	4.2	2.3	61	Negative	4.36	1.86	61	Does not match for speed or content

Table 3.16: Self-Assessment Manikin Results - Tony the Dinosaur

	N	Mean	Std. Deviation
03SAE1 Pleasure	62	4.97	1.367
03SAE2 Arousal	62	6.68	1.888
03SAE3 Dominance	62	4.47	1.586

Table 3.17: Geneva Emotion Wheel Result (Rank Order) - Tony the Dinosaur

	N	Mean	Std. Deviation
03GEW18 Disgust-Repulsion	18	3.06	1.434
03GEW20 Irritation-Anger	14	3.00	1.617
03GEW09 Astonishment-Surprise	15	2.73	1.335
03GEW04 Happiness-Joy	16	2.63	1.360
03GEW13 Worry-Fear	12	2.33	1.371
03GEW12 Sadness-Despair	12	2.17	1.467

This advertisement was predicted to be seen as a fast negative yet the findings of the self-report measures on pace and valence did not match this prediction. Pacing was found to be medium and content was seen as being neither negative nor positive. This might be because of the information density in the message, although not formally coded, was quite low being in cartoon format to replicate a fairy tale. However, the SAM findings were not so contradictory. There were moderate levels of displeasure recorded by about 30% of participants, but the arousal levels were the highest recorded for any message in the pilot study. Dominance scores were only moderate.

The GEW findings illuminate the SAM arousal score further by showing that moderately high levels of disgust-repulsion and irritation-anger were recorded by participants for the message. There were also moderate intensity levels of astonishment-surprise and happiness-joy recorded by about 30% of participants. Low intensity levels of worry-fear and sadness-despair were also noted by participants, which indicates that this message was indeed seen overall as having far more negative emotions than positive.

Advertisement 4 You'll Keep Paying More under Labor

This Liberal Party advertisement shows 10 people of various backgrounds looking at the camera with sad expressions on their faces as a voice over says how they'll keep paying more for different items, especially taxes, under a Federal Labor government. The background instrumental music is solemn to add to the overall impact of the message.

Figure 3.3.4: You'll Keep Paying More under Labor

File Name: 04-You'll Keep Paying More Under Labor.mp4

File Size: 1.82 MB (1,911,483 bytes)

Resolution: 480x270 Duration: 00:00:30



Table 3.18: Pilot Study Results - You'll Keep Paying More under Labor

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
4	Fast	4.5	1.7	64	Negative	3.23	1.78	64	Does not match for speed or content

Table 3.19: Self-Assessment Manikin Results – You'll Keep Paying More under Labor

della is particle	N	Mean	Std. Deviation
04SAE1 Pleasure	64	6.58	1.531
04SAE2 Arousal	64	6.58	1.561
04SAE3 Dominance	64	4.78	1.856

Table 3.20: Geneva Emotion Wheel Result (Rank Order) – You'll Keep Paying

More under Labor

	N	Mean	Std. Deviation
04GEW12 Sadness-Despair	30	3.30	1.179
04GEW13 Worry-Fear	32	3.22	1.263
04GEW18 Disgust-Repulsion	18	3.06	1.110
04GEW20 Irritation-Anger	31	2.87	1.176

04GEW09 Astonishment- Surprise	9	2.78	1.202	
04GEW04 Happiness-Joy	7	1.43	1.134	

This advertisement was predicted to be fast negative but again the findings from the self-report measures contradict this with participants viewing the pace as medium and the valence as being neither positive nor negative. The SAM findings were similar, finding high levels of displeasure yet low levels of arousal. Participants noted that this message neither dominated them nor they dominated it. The GEW findings indicated though that medium intensity levels were recorded for sadness-despair and worry-fear by nearly half of the participants, more than double the number who recorded medium intensity levels of disgust-repulsion when viewing the message.

The GEW findings of sadness-despair may be indicating feelings towards the message itself, not just about the message content. The large number of participants who felt medium intensity levels of worry-fear is interesting as this indicates that this negative message may be effective at generating doubt about the attacked brand which would be one of the objectives of this message.

Advertisement 5 Bob Katter Your Force from the North

Bob Katter is an independent who represents the federal lower house electorate of Kennedy, which is based around Mt Isa, a largely rural area. This advertisement highlights how Bob Katter represents the needs of his seat by not being afraid to raise any issue in Canberra, due to his independence and willingness to get the job done. It is all said by a voice over in a rhyme, and there is no music of any type. This advertisement was shown locally in the Kennedy area during the 2010 Federal Election.

Figure 3.3.5: Bob Katter Your Force from the North

File Name: 05-Bob Katter Your Force From The North.mp4

File Size: 2.41 MB (2,532,053 bytes)

Resolution: 480x264 Duration: 00:00:31



Table 3.21: Pilot Study Results - Bob Katter Your Force from the North

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
5	Fast	6.4	1.7	62	Positive	5.64	1.92	61	Match on speed and content

Table 3.22: Self-Assessment Manikin Results – Bob Katter Your Force from the North

	N	Mean	Std. Deviation
05SAE1 Pleasure	62	4.47	1.501

05SAE2 Arousal	62	5.45	2.030	
05SAE3 Dominance	62	5.27	1.484	

Table 3.23: Geneva Emotion Wheel Result (Rank Order) – Bob Katter Your Force from the North

	N	Mean	Std. Deviation
05GEW04 Happiness-Joy	17	2.76	1.300
05GEW20 Irritation-Anger	21	2.76	1.609
05GEW18 Disgust-Repulsion	15	2.60	1.595
05GEW09 Astonishment- Surprise	13	2.46	1.198
05GEW13 Worry-Fear	13	1.92	1.188
05GEW12 Sadness-Despair	9	1.67	1.118

This message was predicted to be a fast positive message, which the self-report findings on pace and valence confirmed quite convincingly. However, the SAM findings noted that there were moderate levels of pleasure recorded by participants, arousal and dominance, indicating that this message was seen as being more positive than negative by participants.

Although, the GEW findings prove a point of contradiction as roughly a third of participants found the message happiness-joy, a sign of a positive message, but also a third found it irritated or angered them. As the rest of the emotions recorded by the GEW were negative, although in small numbers and intensity levels, this message would warrant further study as it would be seen as being positive. It highlights that possibly the pre-existing low levels of positive attitude towards political advertising and political brands can influence the perception of even positive messages.

Advertisement 6 Daisy Ad - Australian Greens Election Ad on Climate Change

The "Daisy" is an advertisement by the Australian Greens shown at the 2010 Federal Election. It is based on the 'Daisy' advertisement shown by the Democrat party in support of Lyndon Johnson during the 1964 US Presidential campaign. This time the advertisement shows the little girl plucking petals from a daisy as she slowly counts to 10. There are rapid scene changes to images of climate destruction or industrial pollution before towards the end of the advertisement a voice over comes on and says if you care about the environment then you'll vote for the Greens. There is no music.

Figure 3.3.6: Daisy Ad - Australian Greens Election Ad on Climate Change



Table 3.24: Pilot Study Results – Daisy Ad – Australian Greens Election Ad on Climate Change

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
6	Fast	4.3	1.9	64	Positive	3.34	2.15	64	Does not

llip :					match for speed
5 miles					or
desire					content
				200	

Table 3.25: Self-Assessment Manikin Results – Daisy Ad – Australian Greens Election Ad on Climate Change

the lateral later.	N	Mean	Std. Deviation
06SAE1 Pleasure	64	6.91	1.377
06SAE2 Arousal	63	5.98	1.782
06SAE3 Dominance	63	5.02	1.888

Table 3.26: Geneva Emotion Wheel Result (Rank Order) – Daisy Ad – Australian Greens Election Ad on Climate Change

	N	Mean	Std. Deviation
06GEW13 Worry-Fear	40	3.28	1.320
06GEW12 Sadness-Despair	30	3.00	1.462
06GEW18 Disgust-Repulsion	16	2.81	1.328
06GEW20 Irritation-Anger	21	2.81	1.250
06GEW09 Astonishment- Surprise	9	2.22	1.093
06GEW04 Happiness-Joy	7	1.86	.900

This message was predicted to be seen as a fast positive message by the participants, but was reported as being a medium-paced message and, interestingly, a moderate negative message on valence. This could be attributed to some very brief images of climate destruction and harm that are shown in the message. This is reinforced by the findings from the SAM that find that participants found this message had high levels of displeasure, low levels of excitement, but only moderate levels of domination or dominated. The GEW findings also reinforce these findings, with a large number of participants reporting medium-high levels of intensity of worry-fear and sadness-despair, which are primarily negative emotions. A third of respondents also noted that this message caused medium levels of disgust-repulsion and irritation-anger, again negative emotions. These findings from this message indicate that even though perhaps the Greens didn't realise it they actually created a medium-paced negative message rather than a fast-paced positive message. This highlights the uniqueness of political advertising when it comes to the areas of advertising and communications theory being applied in practice.

Advertisement 7 Take Action Australian Greens

"Take Action" is an advertisement by the Australian Greens shown during the 2007 Australian Federal Election. The advertisement commences with a little girl on a swing, and then goes into a series of rapid scene changes of protest marches on environmental issues, environmental images, such as wind generators, and the Greens leader Bob Brown standing up in Parliament. It is set to a backing track that includes lyrics of doing good things for the environment and with the chorus of "Take Action, Green Action".

Figure 3.3.7: Take Action Australian Greens

File Name: 07-Take Action Australian Greens Election 07.mp4

File Size: 2.29 MB (2,410,251 bytes)

Resolution: 480x264 Duration: 00:00:32



Table 3.27: Pilot Study Results - Take Action Australian Greens

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
7	Fast	5.2	1.8	63	Positive	6.08	1.88	62	Match on speed and content.

Table 3.28: Self-Assessment Manikin Results - Take Action Australian Greens

N	Mean	Std. Deviation	
07SAE1 Pleasure	64	4.52	1.333

07SAE2 Arousal	64	5.61	2.083	
07SAE3 Dominance	64	5.20	1.615	

Table 3.29: Geneva Emotion Wheel Result (Rank Order) – Take Action Australian Greens

	N	Mean	Std. Deviation
07GEW13 Worry-Fear	11	3.09	1.758
07GEW04 Happiness-Joy	18	3.06	1.162
07GEW20 Irritation-Anger	15	2.60	1.454
07GEW18 Disgust-Repulsion	10	2.30	1.703
07GEW12 Sadness-Despair	7	2.14	1.574
07GEW09 Astonishment- Surprise	10	1.80	.919

This message was predicted to be a fast positive message which was confirmed by the findings from the self-reported measures on pacing and valence. The SAM pleasure rating for this message was only medium, and the message created low levels of excitement in participants and moderate levels of the viewer feeling in control of the message. However the GEW emotions again revealed the perception of political messages held by most participants as being negative. Medium levels of worry-fear were recorded by a small number of participants, with less than a third finding only medium levels of happiness-joy from this message. This was the only positive emotion recorded by participants for this message, with small levels of different negative emotions recorded by a small number of participants. This indicates that again a positive message was perceived as anything but by most participants who watched this message.

Advertisement 8 Kevin Rudd's Bag of Tricks and Excuses

"Kevin Rudd's Bag of Tricks and Excuses" is a Liberal Party advertisement shown just before the 2010 Australian Federal Election, and just before Kevin Rudd stood aside as Prime Minister in favour of Julia Gillard who had mounted a challenge against him in late June 2010. It starts off with a big red question mark shown on a black screen, and then goes into a parody sales style message about all of the alleged policy failures of Kevin Rudd.

It uses features that the consumer would associate with a sales message of a closing down sale of a carpet shop or used car dealer, such as large font on plain coloured backgrounds, cartoon captions next to Kevin Rudd's face, spinning words in large fonts and extreme close ups of Kevin Rudd and Peter Garrett. There is no music.

Figure 3.3.8: Kevin Rudd's Bag of Tricks and Excuses

File Name: 08-Kevin Rudd's bag of tricks and excuses.mp4

File Size: 7.79 MB (8,179,063 bytes)

Resolution: 1280x720 Duration: 00:00:33



Table 3.30: Pilot Study Results - Kevin Rudd's Bag of Tricks and Excuses

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
8	Medium	6.8	1.4	64	Negative	4.09	2.36	64	Match on speed and does not match on content

Table 3.31: Self-Assessment Manikin Results – Kevin Rudd's Bag of Tricks and Excuses

	N	Mean	Std. Deviation
08SAE1 Pleasure	63	4.49	1.822
08SAE2 Arousal	63	5.00	2.222
08SAE3 Dominance	63	4.84	1.628

Table 3.32: Geneva Emotion Wheel Result (Rank Order) – Kevin Rudd's Bag of Tricks and Excuses

	N	Mean	Std. Deviation
08GEW04 Happiness-Joy	18	3.22	1.309
08GEW09 Astonishment- Surprise	14	3.14	1.748

08GEW20 Irritation-Anger	19	3.11	1.243
08GEW18 Disgust-Repulsion	20	3.00	1.376
08GEW12 Sadness-Despair	9	2.67	1.323
08GEW13 Worry-Fear	9	2.22	1.302

This message was predicted to be a medium negative message by theory and the self-report findings on the pace and valence scale items confirmed this. The SAM scores noted for this message were neither pleasant nor unpleasant, moderate levels of arousal and neither dominated nor dominant for the message. The GEW findings for this message confirm the trend that is emerging in this analysis of only one positive emotion, happiness-joy, being recorded by less than a third of participants at medium levels of intensity. All other emotions recorded by participants were negative. Irritationanger and disgust-repulsion were noted by roughly a third of participants at medium levels of emotional intensity, along with a small number of participants who noted medium levels of astonishment-surprise, and then small levels of emotional intensity were noted for sadness-despair and worry-fear.

Advertisement 9 Tony Abbott Can't Manage the Economy

"Tony Abbott Can't Manage the Economy" is a Labor Party advertisement shown during the 2010 Australian Federal Election. The advertisement starts off with a black screen that soon fades into a black and white image of Tony Abbott with a question next to it that asks how can Tony Abbott manage the economy when his own party doesn't think he can. Excerpts from John Hewson, a former Liberal Party leader, and Peter Costello, another former Liberal Party leader, are shown talking about Tony Abbott's ability to handle the economy in a negative way. There is no music.

Figure 3.3.9: Tony Abbott Can't Manage the Economy

File Name: 09-Tony Abbott can't manage the Economy.mp4

File Size: 1.75 MB (1,845,044 bytes)

Resolution: 480x270 Duration: 00:00:31



Table 3.33: Pilot Study Results - Tony Abbott Can't Manage the Economy

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
9	Medium	5.3	1.4	64	Negative	3.50	1.94	64	Match on speed and content

Table 3.34: Self-Assessment Manikin Results – Tony Abbott Can't Manage the Economy

	N	Mean	Std. Deviation
09SAE1 Pleasure	64	5.09	1.509
09SAE2 Arousal	64	5.55	2.070
09SAE3 Dominance	64	5.31	1.500

Table 3.35: Geneva Emotion Wheel Result (Rank Order) – Tony Abbott Can't

Manage the Economy

	N	Mean	Std. Deviation
09GEW20 Irritation-Anger	16	3.56	1.209
09GEW13 Worry-Fear	14	3.43	1.342
09GEW12 Sadness-Despair	12	3.08	1.443
09GEW18 Disgust-Repulsion	16	3.06	1.389
09GEW09 Astonishment- Surprise	13	2.69	1.251
09GEW04 Happiness-Joy	13	2.23	1.481

This advertisement was predicted to be a medium negative message, which was confirmed by the findings from the self-report scale items of pace and valence. The SAM scores noted for this message were neither pleasant nor unpleasant, moderate levels of arousal and neither dominated nor dominant for the message. However the GEW scale items revealed medium-high levels of irritation-anger by 25% of

participants. Roughly 20% of participants noted medium-high levels of worry-fear for this message, and the same number of participants noted medium levels of emotional intensity for sadness-despair, disgust-repulsion, astonishment-surprise and happiness-joy. This means that with only one positive emotion being recorded for this message, with the rest being negative, and only one of these, worry-fear, being recorded that may indicate that the message is achieving the objectives that the political organisation thinks it should be, that negative advertising is not working the way many think it does.

Advertisement 10 Tony Abbott's Tax Hike

"Tony Abbott's Tax Hike" is a Labor Party advertisement shown during the 2010 Federal Election campaign. The advertisement starts off with a colour image of a family next to a black and white one of Tony Abbott, with a caption above that asks how can a family afford Tony Abbott's tax hike. This is the main format used during the message, but there are other images used of groceries, fruit and vegetables, petrol and household bills with a caption that says the tax on these products will all increase under Tony Abbott. There is no music.

Figure 3.3.10: Tony Abbott's Tax Hike

File Name: 10-Tony Abbott's tax hike .mp4 File Size: 2.14 MB (2,251,164 bytes)

Resolution: 450x360 Duration: 00:00:30



Table 3.36: Pilot Study Results - Tony Abbott's Tax Hike

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
10	Medium	4.4	1.5	64	Negative	3.00	1.69	64	Match on speed and conten

Table 3.37: Self-Assessment Manikin Results – Tony Abbott's Tax Hike

	N	Mean	Std. Deviation
10SAE1 Pleasure	64	6.38	1.327
10SAE2 Arousal	64	6.52	1.773
10SAE3 Dominance	64	4.81	1.885

Table 3.38 Geneva Emotion Wheel Result (Rank Order) – Tony Abbott's Tax Hike

	N	Mean	Std. Deviation	
10GEW20 Irritation- Anger	37	3.41	1.142	
10GEW13 Worry-Fear	29	3.38	1.115	
10GEW12 Sadness- Despair	16	3.38	.806	
10GEW18 Disgust- Repulsion	29	3.00	1.363	
10GEW09 Astonishment-	11	2.00	1.095	

Surprise			7.0 7.0 (0.0)	
10GEW04 Happiness-Joy	6	1.17	.408	

This advertisement was predicted to be a medium negative message, which was confirmed by the findings from the self-report scale items of pace and valence. The SAM scores noted for this message were medium-high levels of unpleasantness, low levels of arousal towards the message and participants found that this message made them feel dominated by the sponsor at moderate levels. This was one of the highest adverse findings noted for any message by the SAM for this pilot test. The SAM findings were confirmed by the GEW findings of medium-high levels of irritation-anger by the majority of participants. Nearly half of participants noted medium-high levels of worry-fear and medium-high levels of sadness-despair were recorded by 25% of participants. Medium levels of disgust-repulsion were also noted by nearly half of participants. The findings from the GEW items for this advertisement are indicative of a message that is not well liked by those who watched it. Nor did this message arouse respondents to action, as indicated by the SAM arousal item. The findings from this message also support that promises of loss are not motivating voters to engage in exchanges of this type with political organisations.

Advertisement 11 Julia Gillard - Let's Move Australia Forward

This is a Labor Party advertisement shown during the 2010 Federal Election campaign. It commences with a smiling Julia Gillard looking straight into the camera and then talking about all of the major policies Labor promises to implement under a Labor government led by her. A title and very brief policy description are attached to the relevant image in a blue caption box. The advertisement ends with Julia Gillard smiling at the camera. There is some light instrumental background music.

Figure 3.3.11: Julia Gillard - Let's Move Australia Forward

File Name: 11-Julia Gillard - Let's move Australia forward.mp4

File Size: 1.85 MB (1,945,052 bytes)

Resolution: 480x270 Duration: 00:00:30



Table 3.39 Pilot Study Results - Let's Move Australia Forward

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
11	Medium	4.8	1.6	64	Positive	6.75	1.85	64	Match on speed and content

Table 3.40: Self-Assessment Manikin Results - Let's Move Australia Forward

	N	Mean	Std. Deviation
11SAE1 Pleasure	63	4.24	1.614
11SAE2 Arousal	63	6.33	2.064
11SAE3 Dominance	63	5.25	1.586

Table 3.41: Geneva Emotion Wheel Result (Rank Order) – Let's Move Australia
Forward

	N	Mean	Std. Deviation
11GEW04 Happiness-Joy	35	2.71	1.296
11GEW20 Irritation-Anger	21	2.67	1.528
11GEW12 Sadness-despair	9	2.67	1.500
11GEW18 Disgust-Repulsion	15	2.60	1.454
11GEW13 Worry-Fear	13	2.31	1.251
11GEW09 Astonishment- Surprise	11	2.09	1.578

This advertisement was predicted to be a medium positive message, which was confirmed by the findings from the self-report scale items of pace and valence. The SAM findings for this message were that participants found this message mildly pleasant, medium levels of excitement and low levels of domination over the message. These findings also reinforce the message prediction of medium positive. However, the GEW findings are contradictory. The highest level of emotional intensity in levels and participants was recorded for happiness-joy. However all other emotions recorded for this message were negative, although participant numbers for each were less than 25%.

As this message was medium positive, the fact that negative emotions were recorded at all towards the message could be an indicator of different effects that might be occurring. Firstly, pre-existing attitude towards the message and brand in some participants means that whenever they see any political message they dislike it. Secondly, attitude towards the specific brand could be being noted by participants, in this case either the Labor Party or Julia Gillard. Next, the promise being offered is disliked by participants. To understand why these effects were occurring and what role message structure and valence was having on them, the further study using psychophysiological measures should help uncover some more reasons behind these effects, or if they are occurring at all. It may also confirm the findings from this pilot test and the existence of these effects in political advertising, which in turn would warrant further research in this area.

Advertisement 12 Support Real Action with Tony Abbott

This is a Liberal Party advertisement shown during the 2010 Federal Election campaign. The advertisement starts with an image of Tony Abbott next to the Liberal Party campaign slogan. The advertisement then goes into a series of images of the main policy promises that the Liberal Party would implement if elected, with a very brief description in a caption box. The advertisement ends with Tony Abbott talking to the camera. There is some light instrumental background music.

Figure 3.3.12: Support Real Action with Tony Abbott

File Name: 12-Support Real Action with Tony Abbott.mp4

File Size: 1.76 MB (1,850,788 bytes)

Resolution: 480x264 Duration: 00:00:30



Table 3.42: Pilot Study Results - Support Real Action with Tony Abbott

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
12	Medium	4.6	1.6	62	Positive	4.95	1.82	62	Match on speed and mismatch on content

Table 3.43: Self-Assessment Manikin Results – Support Real Action with Tony
Abbott

	N	Mean	Std. Deviation
12SAE1 Pleasure	63	5.21	1.416
12SAE2 Arousal	63	6.60	1.914
12SAE3	63	4.94	1.605
Dominance	والماء		

Table 3.44: Geneva Emotion Wheel Result (Rank Order) – Support Real Action with Tony Abbott

nation in the agent own	N	Mean	Std. Deviation
12GEW12 Sadness-Despair	10	3.20	1.549
12GEW20 Irritation-Anger	18	3.17	1.581
12GEW18 Disgust-Repulsion	13	3.15	1.573
12GEW13 Worry-Fear	8	2.25	1.581
12GEW04 Happiness-Joy	7	2.14	1.069
12GEW09 Astonishment- Surprise	6	1.83	.753

This advertisement was predicted to be a medium positive message, which was confirmed by the findings from the self-report scale items of pace and valence. The SAM findings for this message were levels of neither unpleasantness nor pleasantness, high levels of excitement or arousal, and neither dominated nor dominant. The GEW findings for this message were interesting as medium levels of negative emotions were recorded by between 20-25% of participants for three items: sadness-despair, irritationanger and disgust-repulsion. These negative emotions could be why the SAM level of

arousal was so high. The only positive emotion recorded was for happiness-joy and by only 11% of participants. As noted above, clearly there are some important reasons why a medium positive message is been seen more as a negative message than a positive one.

Advertisement 13 Greens (Gruen Nation by Republic of Everyone)

This advertisement was not shown during the election campaign but instead was part of the Australian Broadcasting Commission (ABC) television show *Gruen Nation* that discussed advertising tactics and execution during the 2010 Federal Election. It was part of the segment "The Pitch" that asked two advertising agencies to make pitches for a pretend account. In this case, the Greens account.

The advertisement starts off with a slow, classical instrumental backing track, that continues for the entire message, and an image of a house surrounded by flood water. Words appear on the screen that asks the respondent if they think that climate change needs policy change. Other images are then shown that highlight the key policy promises of the Greens, with a short caption next to them that asks if this is a policy issue that the viewer thinks needs to be implemented. The message ends with a black screen and a simple sentence that states, "If you think, vote Green".

Figure 3.3.13: Greens (Gruen Nation by Republic of Everyone)

File Name: 13-The Greens ad done for Gruen Nation by Republic of Everyone.mp4

File Size: 2.26 MB (2,378,183 bytes)

Resolution: 480x270 Duration: 00:00:30



Table 3.45: Pilot Study Results - Greens (Gruen Nation by Republic of Everyone)

Ad	Predicted	Mean	SD	n	Predicted	Content	SD	n	Result
13	Medium	4.0	1.7	62	Positive	6.27	2.27	63	Match on speed and content

Table 3.46: Self-Assessment Manikin Results – Greens (Gruen Nation by Republic of Everyone)

	N	Mean	Std. Deviation
13SAE1 Pleasure	64	5.31	2.054
13SAE2 Arousal	63	6.33	2.087
13SAE3 Dominance	64	5.52	1.773

Table 3.47 Geneva Emotion Wheel Result (Rank Order) – Greens (Gruen Nation by Republic of Everyone)

	N	Mean	Std. Deviation
13GEW04 Happiness-Joy	21	3.14	1.389
13GEW12 Sadness-Despair	28	2.89	1.257
13GEW13 Worry-Fear	17	2.82	1.074
13GEW20 Irritation-Anger	11	2.27	1.348
13GEW18 Disgust-Repulsion	9	2.11	1.364
13GEW09 Astonishment- Surprise	11	1.91	1.044

This advertisement was predicted to be a medium positive message, which was not confirmed by the findings from the self-report scale items of pace and valence. These items instead noted that whilst pace was correct, valence was not with this message being perceived as negative. The SAM findings for this message were levels of neither unpleasantness nor pleasantness, high levels of excitement or arousal, and neither dominated nor dominant. The GEW findings for this message show similar results to the self-report measures for valence – a contradiction between the expected and the

actual. Medium levels of happiness-joy were recorded by a third of participants, but medium levels of sadness-despair were found for 44% of participants. Medium-low levels of negative emotions (worry-fear, irritation-anger, disgust-repulsion and astonishment-surprise) were recorded for small numbers of participants as well. If anything this advertisement was a true polariser of those who viewed it. This might note an interesting effect of promises of value that further studies may want to consider – that is even if positive promises of value are preferred they need to be promises that are perceived as having value by the target market, even if this risks alienating other political consumers, as is the case here. This finding would need to be investigated by further research using different methods of data collection examining the effect between promises of value and value creation.

Advertisement 14 Angry Anderson is Fed Up with Labor

This is a Liberal Party advertisement shown in the Sydney metropolitan area only during the 2010 Federal Election campaign. It starts off with a black screen with white writing that tells the viewer why Angry Anderson, a former rock star, is fed up with Labor. He then discusses issues that the Sydney market would identify with. The advertisement ends with him talking to camera about why he won't vote Labor in this election. There is no music during the ad.

Figure 3.3.14: Angry Anderson is Fed Up with Labor

File Name: 14-Angry Anderson is fed up with Labor.mp4

File Size: 1.88 MB (1,975,215 bytes)

Resolution: 480x270 Duration: 00:00:30



Table 3.48: Pilot Study Results - Angry Anderson is Fed Up with Labor

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
14	Slow	4.1	1.4	64	Negative	3.56	1.79	64	Does
									match
		1							on
									speed, match
									on
									content

Table 3.49: Self-Assessment Manikin Results – Angry Anderson is Fed Up with Labor

in the state of the state	N	Mean	Std. Deviation
14SAE1 Pleasure	64	5.69	1.167
14SAE2 Arousal	63	6.52	1.777
14SAE3 Dominance	63	4.83	1.561

Table 3.50: Geneva Emotion Wheel Result (Rank Order) – Angry Anderson is Fed
Up with Labor

	N	Mean	Std. Deviation
14GEW20 Irritation-Anger	33	2.97	1.159
14GEW12 Sadness-Despair	20	2.70	1.031
14GEW18 Disgust-Repulsion	18	2.44	1.294
14GEW13 Worry-Fear	17	2.29	1.160
14GEW09 Astonishment- Surprise	8	2.25	1.165
14GEW04 Happiness-Joy	7	1.29	.756

This advertisement was predicted to be a slow negative message, which was confirmed by the findings from the self-report scale items of pace and valence. The SAM findings for this message were levels of mild unpleasantness, high levels of excitement or arousal and medium-low levels of feeling dominated by the message. The GEW findings for this message were consistent with a negative message from research

conducted in this pilot test. That is medium levels of irritation-anger and sadness-despair by over half of participants for the first item and 33% for the second item. Medium levels of intensity were also recorded by about 20% of participants for disgust-repulsion and worry-fear, which again indicates the negativity towards negative messages. If the findings from the SAM and GEW are compared for this advertisement it could be argued that there is a relationship between SAM levels of excitement/arousal and high numbers of participants recording medium to high levels of irritation-anger. This finding might be worth noting for future research, which might use this method as a causal link to support pre-existing attitudes towards the message and brand influencing how negative promises of exchange are viewed by voters.

Advertisement 15 Really Mr Howard

This is a Labor Party advertisement that was shown during the 2007 Australian Federal Election campaign. It commences with an image of then Prime Minister John Howard on an outdoor billboard above a major road. It is then replaced with an image of a woman who looks at the camera and discusses all of the negatives about John Howard, ending with her saying "Really Mr Howard?" There is no music during the message.

Figure 3.3.15: Really Mr Howard



Table 3.51: Pilot Study Results - Really Mr Howard

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
15	Slow	4.3	1.6	51	Negative	3.37	1.70	51	Does not match on speed, match on content

Table 3.52: Self-Assessment Manikin Results - Really Mr Howard

	N	Mean	Std. Deviation
15SAE1 Pleasure	51	5.80	1.296
15SAE2 Arousal	51	6.31	1.490
15SAE3 Dominance	51	4.69	1.738

Table 3.53: Geneva Emotion Wheel Result (Rank Order) - Really Mr Howard

	N	Mean	Std. Deviation
15GEW18 Disgust-Repulsion	10	3.30	1.252
15GEW13 Worry-Fear	17	3.29	.920
15GEW12 Sadness-Despair	20	3.15	1.089
15GEW20 Irritation-Anger	24	3.08	.974

15GEW09 Astonishment- Surprise	9	2.89	1.054
15GEW04 Happiness-Joy	8	1.63	.916

This advertisement was predicted to be a slow negative message, which was confirmed by the findings from the self-report scale items of pace and valence. The SAM findings for this message were levels of mild unpleasantness, high levels of excitement or arousal and medium-low levels of feeling dominated by the message. The notable GEW findings for this message were that 15% of participants noted medium-high levels of disgust-repulsion, 27% noted medium-high levels of worry-fear, 31% of participants noted medium-high levels of sadness-despair and 38% of participants noted medium levels of irritation-anger. These findings are consistent with earlier findings in this study on the same type of message; that is, negative messages create negative effects, and often these effects are amplified because of the pre-existing attitudes towards the advertisement type and brand held by consumers.

Advertisement 16 Taking Australia Backwards

This is a Labor Party advertisement shown during the 2010 Federal Election campaign. The advertisement starts off with a full screen image of Tony Abbott, which then gradually gets smaller every time a negative attribute of the brand is mentioned by the voice over. Captions appear from newspapers that support the voiceover, accompanied by a shrinking sound effect. The message ends with an image of Tony Abbott and the words "Don't Go Back" in large red font. There is no music in the message.

Figure 3.3.16: Taking Australia Backwards

File Name: 16-Taking Australia Backwards.mp4 File Size: 1.83 MB (1,927,837 bytes)

Resolution: 480x270 Duration: 00:00:36



Table 3.54: Pilot Study Results - Taking Australia Backwards

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
16	Slow	4.2	1.7	63	Negative	3.19	1.70	63	Does not match on speed, match
									content

Table 3.55: Self-Assessment Manikin Results - Taking Australia Backwards

	N	Mean	Std. Deviation
16SAE1 Pleasure	64	5.81	1.296
16SAE2 Arousal	63	6.44	1.749
16SAE3 Dominance	63	4.73	1.658

Table 3.56: Geneva Emotion Wheel Result (Rank Order) – Taking Australia

Backwards

	N	Mean	Std. Deviation
16GEW18 Disgust-Repulsion	16	3.38	1.258
16GEW20 Irritation-Anger	29	3.31	1.168
16GEW12 Sadness-Despair	16	2.56	1.031
16GEW13 Worry-Fear	24	2.54	1.215
16GEW09 Astonishment- Surprise	9	2.44	1.236
16GEW04 Happiness-Joy	9	2.00	1.118

This advertisement was predicted to be a slow negative message, which was confirmed by the findings from the self-report scale items of pace and valence. The SAM findings for this message were levels of medium unpleasantness, high levels of excitement or arousal, and medium-low levels of feeling dominated by the message. The notable GEW findings for this message were that 25% of participants noted medium-high levels of disgust-repulsion, 45% noted medium-high levels of irritation-anger, 25% noted medium levels of sadness-despair, and 38% of participants noted medium levels of

worry-fear. These results are consistent with earlier findings on this type of message from messages of similar types examined in this research.

Advertisement 17 Double Value Voting

This is a Greens advertisement that screened during the 2010 Federal Election. It opens with an image of then leader, Bob Brown, talking to the camera. Another image of Bob Brown appears next to the first when the words "Double Value" are mentioned. Then the two discuss why voting for the Greens is double value. The advertisement ends with the Greens campaign jingle and the campaign slogan.

Figure 3.3.17: Double Value Voting



Table 3.57: Pilot Study Results - Double Value Voting

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
17	Slow	4.3	1.7	64	Positive	5.69	1.71	64	Does not match on speed, match on content

Table 3.58: Self-Assessment Manikin Results – Double Value Voting

	N	Mean	Std. Deviation
17SAE1 Pleasure	63	4.71	1.486
17SAE2 Arousal	63	6.52	1.966
17SAE3 Dominance	61	4.87	1.466

Table 3.59: Geneva Emotion Wheel Result (Rank Order) - Double Value Voting

	N	Mean	Std. Deviation
17GEW20 Irritation-Anger	9	2.67	1.658
17GEW04 Happiness-Joy	15	2.33	1.543
17GEW18 Disgust-Repulsion	10	2.00	1.333
17GEW12 Sadness-Despair	7	2.00	1.732
17GEW09 Astonishment- Surprise	8	1.75	.886

17GEW13 Worry-Fear	6	1.33	.816	

This advertisement was predicted to be a slow positive message, which was confirmed by the findings from the self-report scale items of pace and valence. The SAM findings for this message were interestingly medium levels of unpleasantness, high levels of excitement or arousal, and feeling neither dominated nor dominating the message. The notable GEW findings for this message were interesting in that only one positive emotion was recorded, and even here it was only found in 23% of participants at medium-low levels of happiness-joy. All other emotions noted for this advertisement were negative, albeit at medium or low-medium levels and in small number of participants for each. However, for a message that does not attack an opponent the fact that it has negative emotions might mean as noted above that unless the viewer is in the target market for that product then they are likely to feel negative emotions towards the message. Whether this is due to them not being a party supporter or liking the advertised brand or just not liking political advertising of any type from any brand, is something that it is hoped the main study can answer as it will be testing for this effect.

Advertisement 18 Household Assistance Package - Families

This is an advertisement for a Labor Government policy called the Household Assistance Package. It was shown in May and June of 2012. The policy was part of the Labor Government election promise of value at the 2010 Federal election. The advertisement is seen as political advertising as the policy relates to a party promise made at an election.

The advertisement starts off showing a kitchen in a suburban house. It shows the kitchen being used throughout a 12-hour period in rapid motion, but never cuts to a different scene until half way through when the fridge door is shown with messages about the campaign shown in the form of notices. There is light instrumental music played throughout the message.

Figure 3.3.18: Household Assistance Package - Families

File Name: 18-Household Assistance Package - Families.mp4

File Size: 6.17 MB (6,471,680 bytes)

Resolution: 1280x720 Duration: 00:00:31



Table 3.60: Pilot Study Results - Household Assistance Package - Families

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
18	Slow	6.0	1.7	60	Positive	6.92	1.46	60	Does not match on speed, match on content.

Table 3.61: Self-Assessment Manikin Results – Household Assistance Package – Families

	N	Mean	Std. Deviation
18SAE1 Pleasure	62	4.18	1.635
18SAE2 Arousal	61	5.70	2.216
18SAE3 Dominance	61	5.18	1.336

Table 3.62: Geneva Emotion Wheel Result (Rank Order) – Household Assistance
Package – Families

	N	Mean	Std. Deviation
18GEW04 Happiness-Joy	30	3.13	1.074
18GEW09 Astonishment- Surprise	8	2.50	.926
18GEW20 Irritation-Anger	12	2.17	1.467
18GEW13 Worry-Fear	9	2.11	1.537
18GEW18 Disgust-Repulsion	9	1.56	1.014
18GEW12 Sadness-Despair	10	1.50	.972

This advertisement was predicted to be a slow positive message, which was not confirmed by the findings from the self-report scale items of pace and valence. The participants perceived this advertisement to be fast-paced and to be negative in valence. This is interesting as there are no negative images or content in the advertisement. However, what is interesting to note is that the message does contain one scene of fast moving edits within the scene that might make the viewer feel as though the message is

fast in pace and presents the viewer with too much information to process at the one time, making them feel negative emotions towards the message.

This could explain why, although the SAM findings for this message were levels of low-medium pleasantness, there was medium-high levels of excitement or arousal, and feeling neither dominated nor dominating the message. The notable GEW findings for this message were the high levels of happiness-joy for this message compared to all other emotions. Proportionally this message had far higher positive emotions than any other message in the pilot test, with medium-high levels of emotion being recorded by nearly half of all participants. Whilst negative emotions were recorded for this message, they were only at small levels and in small numbers. One interesting finding from this is related to the value exchange that this message is about appeals to a wider market than all other messages, and there was no discussion of any other political party or policy, therefore, keeping the information density in the message at likely low perceived levels. This is another interesting finding from the pilot research.

Advertisement 19 Stand up for Real Action

This is a Liberal Party advertisement shown at the 2010 Federal Election campaign. The advertisement commences with the Liberal Party campaign slogan and logo. It then shows Tony Abbott, and then Joe Hockey, addressing the four key promises of value for the Liberal Party for the 2010 election. The advertisement ends with the party jingle, slogan and logo. There is light instrumental music playing throughout the message.

Figure 3.3.19: Stand up for Real Action

File Name: 19-Stand up for Real Action 2.mp4

File Size: 1.88 MB (1,978,941 bytes)

Resolution: 480x270 Duration: 00:00:30



Table 3.63: Pilot Study Results - Stand up for Real Action

Ad	Predicted	Mean	SD	n	Predicted	Content	SD	n	Result
19	Slow	5.0	1.6	62	Positive	5.20	2.10	61	Does not match on speed or content

Table 3.64: Self-Assessment Manikin Results - Stand up for Real Action

	N	Mean	Std. Deviation
19SAE1 Pleasure	63	4.89	1.667
19SAE2 Arousal	63	5.68	2.085
19SAE3 Dominance	63	5.22	1.621

Table 3.65: Geneva Emotion Wheel Result (Rank Order) – Stand up for Real Action

	N	Mean	Std. Deviation
19GEW20 Irritation-Anger	18	2.89	1.641
19GEW04 Happiness-Joy	13	2.85	1.573
19GEW12 Sadness-Despair	12	2.75	1.712
19GEW18 Disgust-Repulsion	15	2.73	1.751
19GEW09 Astonishment- Surprise	12	1.92	1.084
19GEW13 Worry-Fear	10	1.80	1.476

This advertisement was predicted to be a slow positive message, which was not confirmed by the findings from the self-report scale items of pace and valence. Pace was seen by participants to be medium and valence was seen to be mildly negative. Again, this could be because of the information density in the message, pre-existing attitudes to the brand and advertisement, or another structural or content feature of the message. This is why understanding the effect of structural features on the emotional responses to political messages is an important motivation for the main study.

The SAM findings for this message were interestingly low levels of pleasantness, but high levels of excitement or arousal, and feeling neither dominated nor dominating the message. The notable GEW findings for this message were that less than 25% of participants found this message emotionally arousing in any one context, and all emotion levels were only medium or lower in intensity. So whilst the message was slow positive, and whilst it did upset some, it was not to the extent or levels of similar paced negative messages. This further reinforces the findings on the use of negative messages in political campaigns: that is they are doing more harm than good and need to be used far less than what they are currently.

Advertisement 20 Nerf Ad - Nerf N-Strike Elite Rampage Retaliator

This is an advertisement for the Nerf Rampage toy dart gun. It was not shown in the Australian market unless the participant watched it on YouTube. Therefore, participants were less likely to have any existing bias towards the message. The advertisement served as non-political measure and helped clear participant memory and attitudes before completing the post-test survey. The advertisement shows users using the Nerf gun in different ways throughout the entire message, with an extremely high number of cuts (seven) in the last five seconds of the message. There is instrumental backing music all the way through the message, along with voice overs to explain key product features at various times in the message.

Figure 3.3.20: Nerf Ad - Nerf N-Strike Elite Rampage Retaliator

File Name: 20-Nerf N-Strike Elite Rampage _ Retaliator TV Commercial Prese.mp4

File Size: 8.81 MB (9,240,383 bytes)

Resolution: 1280x720 Duration: 00:00:27



Table 3.66: Pilot Study Results - Nerf N-Strike Elite Rampage Retaliator

Ad	Predicted	Mean	SD	n	Predicted	Content Mean	SD	n	Result
20	Fast	6.8	1.6	53	Positive	6.58	1.91	53	Match on speed and content

Table 3.67: Self-Assessment Manikin Results – Nerf N-Strike Elite Rampage Retaliator

	N	Mean	Std. Deviation
20SAE1 Pleasure	54	3.50	1.437
20SAE2 Arousal	54	3.87	2.291
20SAE3 Dominance	54	5.22	2.098

Table 3.68: Geneva Emotion Wheel Result (Rank Order) - Nerf N-Strike Elite Rampage Retaliator

Assort on obers and it is a man	N	Mean	Std. Deviation
20GEW09 Astonishment- Surprise	19	3.53	1.389
20GEW04 Happiness-Joy	34	3.47	1.051
20GEW20 Irritation-Anger	8	2.38	1.506
20GEW13 Worry-Fear	7	2.29	1.704
20GEW12 Sadness-Despair	6	1.83	1.602
20GEW18 Disgust-Repulsion	6	1.67	1.633

This advertisement was predicted to be a fast positive message, which was confirmed by the findings from the self-report scale items of pace and valence. The SAM findings for this message were in stark contrast to the previous political messages. High levels of pleasure and arousal were present and the message made participants feel neither dominated nor dominating of the message. If anything these SAM findings are probably what political advertisers should aim for with a positive message.

The notable GEW findings for this message were high levels of astonishment-surprise by 30% of participants, high levels of happiness-joy for 53% of participants but a small number of participants reported medium to low levels of four negative emotions for this message: irritation-anger, worry-fear, sadness-despair and disgust-repulsion.

Summary of Outcomes

Only in politics do brands communicate two promises of value with consumers: one for loss and one for gain. The results from this pilot study show preliminary confirmation that of these two that most people prefer to see positive messages from political organisations. The results from this study also support the proposition that for this reason voters prefer exchanges for promises of value over those of loss.

Other notable findings from this pilot study are that these results indicate that there is a strong likelihood that pre-existing attitudes towards the political advertisement and brand in some participants means that whenever they see any political message they dislike it, even if it is positive, although the more negative the message, the more negative the response to the message. In fact some of the negative messages show that this effect could be being amplified if the message uses structural and content features to accentuate the negative aspect to it.

Table 3.69: Summary table of matching between predicted and actual means on speed and content.

Ad	Title	Author	Predicted Speed	Actual Mean	Match?	Predicted content	Actual Mean	Match ?
1	Training Ad - Cadbury Dancing Clothes Official TV Ad	Cadbury	Fast	5.9	Yes	Positive	6.53	Yes
2	Same Old Labor Show	Liberal Party	Fast	6.4	Yes	Negative	4.14	No
3	Tony the Dinosaur by Harrie, Aged 11 Years Old	Australian Labor Party	Fast	4.2	No	Negative	4.36	No

4	You'll Keep Paying More	Liberal National Party	Fast	4.5	No	Negative	3.23	No
	under Labor	Carrier I						
5	Bob Katter Your Force	Independe nt	Fast	6.4	Yes	Positive	5.64	Yes
	from the North							
6	Daisy Ad - Australia n Greens	Greens	Fast	4.3	No	Positive	3.34	No
7	Take Action Australia n Greens Election 07	Greens	Fast	5.2	Yes	Positive	6.08	Yes
8	Kevin Rudd's Bag of Tricks and Excuses	Liberal National Party	Medium	6.8	Yes	Negative	4.09	No
9	Tony Abbott Can't Manage the Economy	Australian Labor Party	Medium	5.3	Yes	Negative	3.50	Yes

10	Tony Abbott's Tax Hike.	Australian Labor Party	Medium	4.4	Yes	Negative	3.00	Yes
11	Julia Gillard – Let's Move Australia Forward	Australian Labor Party	Medium	4.8	Yes	Positive	6.75	Yes
12	Support Real Action with Tony Abbott	Liberal National Party	Medium	4.6	Yes	Positive	4.95	No
13	Greens (Gruen Nation by Republic of Everyone)	Greens	Medium	4.0	Yes	Positive	6.27	Yes
14	Angry Anderson is Fed Up with Labor	Liberal National Party	Slow	4.1	No	Negative	3.56	Yes
15	Really Mr Howard	Australian Labor Party	Slow	4.3	No	Negative	3.37	Yes
16	Taking Australia Backward s	Australian Labor Party	Slow	4.2	No	Negative	3.19	Yes

17	Double Value Voting	Greens	Slow	4.3	No	Positive	5.69	Yes
18	Househol d Assistanc e Package - Families	Governm	Slow	6.0	No	Positive	6.92	Yes
19	Stand up for Real Action 2	Liberal National Party	Slow	5.0	No	Positive	5.20	No
20	Nerf Ad - Nerf N- Strike Elite Rampage Retaliator	Commerc	Fast	6.8	Yes	Positive	6.58	Yes

Next, attitude towards the specific brand could be also be noted by participants, in this case either the Labor Party or Julia Gillard, or Tony Abbott and the Liberal Party. It is too difficult to ascertain from these findings if this effect is due to attitude towards political brands in general or the specific brands themselves, but there is a consistent finding that where the leader brand was used in the message higher negative levels of emotional response were noted.

The pilot study also indicated that even if positive promises of value are preferred they need to be promises that are perceived as having value by the target market. However, this approach can risk alienating other political consumers, as was perhaps evident from some of the results in this pilot study. To support this finding, further research would need to investigate this relationship using different methods of data collection, such as psychophysiological methods of arousal and attention.

One final finding of note is related to the value exchange and perceived and actual information density in the message. Although this was not specifically tested for or examined in this study, where messages appealed to a wider market and there was no discussion of any other political party or policy, and the structural features, such as pace did not make the viewer process new information then this kept the information density in the message at likely low perceived levels. This is another interesting finding from the pilot research and does support the need for further research between the relationship between perceived and actual information density, memory and attention to the message and brand, and attitudes towards the message and brand. For example, information density may affect the perceived pace and valence of a message because of the perceived level and complexity of the information that a message contains. The higher the density, and the more complex the information, the more likely that the message will be perceived by the participant as having a faster pace and more negative valence as the viewer may feel as though they are being compelled to work through the message to understand it.

In summary, the pilot study showed that the following messages had significant findings across the SAM and GEW reported measures, with some variation between predicted and actual scores on the self-report measures of pace and valence:

- · Tony the Dinosaur (Fast, Negative)
- · You'll Keep Paying More under Labor (Fast, Negative)
- · Daisy (Fast, Positive)
- Kevin Rudd's Bag of Tricks and Excuses (Medium, Negative)
- · Greens (Gruen Nation by Republic of Everyone) (Medium, Positive)
- Household Assistance Package (Slow, Positive)
- Stand Up For Real Action 2 (Slow, Positive)

These messages were included in the main study, although due to that design only the major party advertisements were examined in any detail. It should also be noted that the main weakness of self-report studies such as this when compared to psychophysiological measures is that they are still not able to capture that immediate response to media. They are also relying upon the immediate recall of emotion by the viewer of a now historical event, rather than an real time measurement of response, which means that some emotions may not be recalled or the memory of that intensity

might be diluted or lost through the processing of other aspects of the message or the messages that followed before. This study also was not able to show messages as part of a TV show that viewers might watch at home in a more normal environment. Instead they were seated next to their peers who could look over their shoulder or even discuss the result with, thereby limiting the ability of these results to be applied with reliability across the general or even youth population. These were important reasons why there was motivation to use a main study using psychophysiological measures that would capture real-time response to advertising stimuli in an environment as close to the viewer's home as possible.

Main Study

Method

The main study's objective was to answer the research questions that are central to this thesis: of whether a promise of exchange for value has higher arousal than a promise of loss, and to examine the relationship between valence and structural features and arousal and memory in political advertising.

As such, the methodology required to answer these questions would need to be able to measure arousal towards the messages as they were presented to capture emotional responses in real time. The most appropriate measures to use to do this would involve the use of psychophysiological measures. Psychophysiological measures are based on biometrics, which is the measurement of biological changes as a way of determining response to stimuli, such as arousal to dynamic video content measured through the methods of skin conductance and heart rate.

To measure memory within the confines of the resources available for this study meant that STRTs could not be used as this would mean having to use another sample. Using STRT's would also not enable the first research question to be answered on the what promise of exchange is better remembered between value and loss as this could only be answered after a viewer had watched all of the study advertisements. Therefore, post-test recall measures would be the most appropriate to use. The theoretical foundation for each of these measures will now be explained.

Prior Studies

There are many existing studies that have used psychophysiological observations to study media processing areas that are being examined in the present study. Whilst there are many other studies that have used the same methodology, they have not examined media or communication constructs and are, therefore, not relevant for the purposes of this thesis. The studies that are of most relevance to this thesis are in recall and memory, structure through message pacing, arousal and emotional responses interacting with one or more of the previous areas. These studies are briefly listed in the area that they examined. They are:

 Recall and Memory (Bolls, Muehling and Yoon 2003; Bradley, Angelini and Lee 2007; Jones, Pentecost and Requena 2005; Lang, Dhillon and Dong 1995; Lang, Newhagen and Reeves 1996; Lang et al. 1999, 2000, 2004, 2005; Singh et al. 1994)

- Message Pacing (Bolls, Muehling and Yoon 2003; Geiger and Reeves 1993; Lang 1990, 1991; Lang et al. 1993; Lang, Bolls and Potter 1999; Lang et al. 2004; Lang et al. 2007; Lang et al. 2005; Lang et al. 2000; Yoon, Bolls and Muehling 1999)
- Arousal (Bolls, Muehling and Yoon 2003; Bradley, Angelini and Lee 2007; Lang 1990, 1991, 2000; Lang, Dhillon and Dong 1995; Lang et al. 2004; Lang et al. 2007; Lang et al. 2000; Lang et al. 2005; Lang, Bolls and Potter 1999; Yoon, Bolls and Lang 1998; Yoon, Bolls and Muehling 1999)
- Emotional Response studied in relation to one of the two prior topics (Bolls, Lang and Potter 2001; Bolls, Muehling and Yoon 2003; Bradley Angelini and Lee 2007; Hazlett and Hazlett 1999; Geiger and Reeves 1993; Lang 2000; Lang in Biocca 1991; Lang, Dhillon and Dong 1995; Lang et al. 1993; Lang, Newhagen and Reeves 1996; Lang et al. 2007; Lang et al. 2005; Lang et al. 2004; Yoon, Bolls and Lang 1998; Yoon, Bolls and Muehling 1999)

Measures

Heart Rate Measures

Heart rate is used to measure arousal to media, as the changes in it that match the media being viewed and thus can be seen as a sign of emotional response to media, in particular the orienting response (Berntson, Quigley and Lozano in Cacioppo, Tassinary and Berntson 2007; Lang 2000; Potter and Bolls 2011). Berntson, Quigley and Lozano (in Cacioppo, Tassinary and Berntson 2007) give an excellent overview of the physiological and medical theory behind the use of the heart as a psychophysiological measure.

The OR was first theorised by Pavlov (1927) as the automatic response to a stimuli – either novel or signal in nature. The response is automatic as it is based on physiological and behavioural responses to the stimuli being observed (Lang 2000). In the context of viewing a television message, this would mean that the moment a new scene would appear on the screen there would be an orienting response to it as the information was processed (Lang 2000).

The intensity and duration of this message processing would depend upon several physiological and behavioural factors that are unique to every individual, but the initial response is automatic. As it is automatic that means that the information seen by the

viewer is processed, and as such some of this information may be transferred into memory for deeper cognitive encoding. This is what makes heart rate a good measure to use for OR as any change in it can signify the intensity and duration of the OR with that particular viewer (Lang 2000).

Being a real time measurement, the readings can then be matched to the media to ascertain what structural or content element was creating the OR noted. For example, if there is a scene that comes on in a message that immediately shows a woman screaming then the OR should last at least for the duration of that scream and be a significant change from the scene one second prior to it where there was no woman screaming. Similarly, if a negative image is displayed as a new scene starts then the OR should again reflect how arousing that negative is to the viewer concerned. A significant finding using OR would show a decrease in heart rate when an arousing message or scene was being viewed. This is because the heart slows to allow for more resources to be allocated of the processing of attention due how the heart beats being determined by both branches of the autonomous nervous system (Bryant and Oliver 2008).

More recently, some concern has been expressed over using heart rates for psychophysiological studies of media processing where it is used as the primary measure. This is because research, such as that by Detenber, Simons and Bennett (1998) and Bryant and Oliver (2008), found that the relationship between heart rates and valence can sometimes be weak when compared to more valence sensitive measures, such as skin conductance or EMGs. They also note that, as the way the heart beats is dually determined, it is necessary to also separate out the two components of the autonomous system using Heart Rate Variability (HRV) measures to determine why the heart is beating the way it is. This technology was not available for this study. However, despite these concerns many media researchers (Lang et al. 2005) still continue to use heart rates as a method of analysing OR. Although the use of heart rates to measure OR is still being debated, it was decided that, as valence as a key part of the study, another measure needed to be used that did not have these issues over the data.

As yet, there have been no such concerns from the use of the second psychophysiological method used in this study, skin conductance response, therefore, with the noted above points on heart rate as a method, the heart rate data collected is used to confirm the results from the skin conductance response data and not as an individual measure in its own right. The theory behind the use of skin conductance response measures will now be explained.

Skin Conductance

Skin conductance as a measure of arousal has been used for several decades (Potter and Bolls 2012: 110). Whilst there are different types of skin conductance measures, there is an accepted definition which according to Potter and Bolls (2012) is

"...a measure of emotional processing that is conceptually and emotionally tied to what has been termed electrodermal activity, or electrical activity that varies according to specific properties of the skin" (110).

Skin conductance response can also be known as Galvanic Skin Response (GSR), Electro Dermal Activity (EDA), Psychogalvanic Reflex (PGR) or just plain Skin Conductance (SC) (Figner and Murphy 2010; Rozado n.d). Whilst these names all describe the same definition, techniques to collect data will vary according to the two main types of response that can be measured: tonic and phasic (Figner and Murphy 2010; Potter and Bolls 2012). Tonic response is the baseline or continuously occurring activity. This is also known by some as the "level" as skin conductance levels should return to this reading once a stimulus is no longer being observed. Phasic response is the temporary response evoked by a specific known stimulus and is known by some as the "response". There can also be a non-specific response, which is a temporary response evoked by an unknown eliciting stimulus (Potter and Bolls 2012). Data on all of these responses are collected as part of most psychophysiological studies. As each type of response is easier to distinguish from the others and as skin conductance is related to activity from the sympathetic branch of the autonomous nervous system rather than from both branches, for some this makes it a more effective measure to use than heart rate (Figner and Murphy 2010; Potter and Bolls 2012).

Skin conductance responses are responses in the amount of sweat produced by the body that is due to exposure to a stimulus. The higher the arousal, the more likely a respondent is to produce sweat. This sweat can be measured by the use of electrical currents and in a lab environment it is possible to detect even relatively minute changes in sweat levels to identify a response (Potter and Bolls 2012). Similar to heart rate, changes in response can be matched to the stimulus observed and, as the response can be narrowed to the one system of the autonomous nervous system, this makes it more

likely that the stimulus caused the response more than some other type of influence (Figner and Murphy 2010). The majority of studies that have analysed emotions, memory, arousal, valence or structural elements in the context of advertising have used skin conductance as one of their psychophysiological measures. As such, for the purposes of measuring arousal to advertisements, skin conductance is a viable method.

Measuring Memory

Psychophysiological Measures

Measuring memory of advertising can be done using both psychophysiological and non-psychophysiological measures. Psychophysiological measures include secondary task reaction times (STRT), eye gaze duration and eye tracking, and brain imaging methods such as event related potentials (ERPs) and functional magnetic resonance imaging (FMRI or fMRI). Brain imaging is by far the most effective to use, but also the most costly, resource intensive and requiring years of medical research training to carry out effectively, all of which were beyond the scope of this research. However these methods are proving enticing to researchers in media who examine attention and there are some studies that are using these methods in broader cognitive science fields (Luck, Woodman and Vogel 2000; Woodman 2010).

The other psychophysiological methods, eye gaze duration and eye tracking, and STRTs are more popular with researchers in advertising as the cost of resources for collecting this data are far more affordable and accessible. The two leading researchers in marketing who use this methodology are Pieters and Wedel. Pieters, Warlop and Wedel (2002) and Wedel and Pieters (2000) have used eye tracking to study the relationship between advertisement originality and familiarity and brand attention and memory. Pieters and Wedel (2004) used a similar methodology to study the relationship between attention capture and transfer in advertising due to brand, pictorial and text size effects. They have also done many other studies examining advertising attention using eye gaze duration and eye tracking methodologies. This technology was not used for this study as this is more of an effective measure when measuring the relationship between attention and advertising, which was not part of the objectives of this research.

The final psychophysiological measure in relation to memory and advertising is secondary task reaction times or STRTs. This method measures the time it takes for a viewer to perform a secondary task whilst performing the primary task which, in the context of an advertising study, might be watching television. The longer the time to complete the secondary task, the more the primary task is using and, therefore, the more the primary task is effective at capturing and keeping attention of the viewer and potentially transferring that information into memory. This makes the use of STRTs excellent at measuring when memory capacity is reached or how much memory a primary task uses of a viewer's limited processing resources (Lang 2000).

The secondary task could be anything that a respondent has been asked to complete when they either see a signal or a stimulus that is connected to that task. For example, Lang et al. (2006) used an audio tone as a STRT that, once heard, required the viewer to press a key on a computer keyboard. However, there are some disadvantages of using this method. Firstly due to the distracting nature of a secondary task usually only STRTs can be studied as a dependent variable. Secondly, and related to the prior point, this makes sample size an issue as different groups are required if there are more than a couple of variables being examined as the arousal effect of the secondary task can make analysing results difficult.

Consequently, STRTs were not used for this study as the distraction and arousal of the secondary task would have meant that another sample group would have been required to examine the relationship between arousal and message content and pacing. This was not possible within the confines of this research.

The other aspect of using psychophysiological measures for measurement of memory is that these measures only capture immediate attention or primary processing of a message and do not capture the feelings or emotions of what a person may feel that occur when they transfer the message content into their memory (Potter and Bolls 2012). In a practical context, if a person were to watch a political message just because they pay attention to this message or watch it closely, and remember the brand, does not mean that they necessarily liked the message. This is the advantage of using non-psychophysiological measures to analyse memory of messages.

Non-Psychophysiological Measures

For this study, due to some of the reasons outlined above, a post-test method of measuring memory would be preferred. This would also capture the more cognitive aspects of recall about both the message and the brand, although brand recall was not a primary focus of this research. Having a more cognitive measure of recall would also help answer the research questions that this thesis wanted to answer, whereas using just

psychophysiological measures would not be able to do this, as this would not be able to support what promise of value was better remembered, only which one had been attended to by a viewer.

Therefore, the most effective method of measuring the different effects of memory posttest that would help answer the research questions is through the use of recall measures
as this would allow the measurement of what type of message was best remembered and
how they remembered it (Potter and Bolls 2012). It needs to be noted here that the usual
methodology with conducting a recall study is to allow at least 15 minutes for
participants to clear their minds before commencing the post-test study questions. In
this research, participants continued to watch several more minutes of television,
including a message break of three minutes that also contained political messages,
before the program ended. The study itself then asked some questions on involvement
with different categories of commercial products as a method of distracting participants
before they commenced the recall questions. This method is consistent with research
methods in the area (Potter and Bolls 2012).

There are three types of recall instrument in use on the survey, each one measuring a different function of memory. Recognition recall measures how well a message was encoded, cued recall a measure how well a message was stored and free recall measures how easily accessed the message is from memory (Potter and Bolls 2012). Each of these will now be described in more depth.

Free Recall Measurement

Free recall can be defined as the ability of the viewer to remember what they have watched without any prompting or cues. The usual methodology is for a viewer to write down everything they can remember about the advertisements they have just seen (Potter and Bolls 2012). Asking the viewer to write down all that they can recall of either the program or the advertisements they have just seen shows how readily that information can be recalled without any prompting, which signifies the importance of that message to the viewer (Lang 1991). As free recall is an open ended question, it can also be a means of capturing any form of cognitive emotion connected with a message when it is retrieved without any prompting. For example a respondent might say, "I liked that ad for product x because it used a song I like". As this occurs without any prompting from the viewer many see free recall as being the most effective way of measuring how a message was remembered (Lang 1990, 1991, 2000; Singh, Rothschild

and Churchill 1988). However, free recall does not measure what the viewer actually paid attention to, as this is more the purpose of a psychophysiological instrument, but when the two are combined an accurate picture can be drawn of what elements of the message a viewer paid the most attention to, and then how this influenced how they remembered the elements of a message.

Measuring free recall can be done using different methods depending upon the objectives of the research. For example, to measure brand recall using this method is just a simple calculation of how many times a brand was recalled as a proportion of the sample. For message recall, the number of times the name of a message was recalled can be used, or the number of words about a message recalled and some allocate scores according to the accuracy of the details of the message recalled.

A newer method of analysing free recall is to undertake sentiment analysis, which analyses the emotional context of the words written down in the free recall. This is performed by two coders or can be done by newer computer programs, such as Linguistic Inquiry and Word Count (LIWC) which can calculate the emotional content of words written down by a participant. However, to minimise errors these results still need to be checked by a coder.

As this study was measuring recall of the message content, the free recall measure to use was actual number of words recalled about each message. This was also consistent with prior studies in the area (Lang 1990, 1991, 2000; Singh, Rothschild and Churchill 1988).

Cued Recall

Cued recall is measured by providing the viewer with a cue, such as the product and brand category of the advertisement (Burke and Srull 1988; Keller 1987) or a screen shot of the advertisement (Krishnan and Chakravarti in Aaker and Biel 1993: 218-219), and then they are asked to recall everything about that message. Cued recall is used to see what components of a message were stored by a viewer, and specific cued recall tasks can focus on sounds by having a snippet of sound played to the participant, or visual elements by having a specific scene act as a cue.

Any of these cues can also act as cues for the entire message itself. In this study, a still picture from the message acted as the recall cue. In some studies, such as this one, random distractor questions are used that contain cued recall questions about messages

that were never shown, but were from the same product category of the messages shown. This acts as a confirmation and reinforcement of the cued recall findings.

Analysis of cued recall is then done using the same methodology as the free recall; that is, either by an accuracy score on the details recalled in the message or the total number of words recalled per message. Other analysis can also be done using a method called sentiment analysis where the emotional context of the words recalled can be measured and analysed. This can be a very time consuming method and subject to bias as two coders are required to code all of the words written down into emotional contexts.

However, with the advent of computer programs such as LIWC sentiment analysis has become easier to perform, but still requires verification from a coder to ensure that there have been no errors. Again, which method of these to use will depend upon the objectives of the research. The research questions of this thesis were concerned about what promise of value was better recalled and what combination of pace and content was the most effective thus a word count would be used as this would indicate which message had the greatest levels of recall when compared to others.

Recognition Recall

The purpose of a recognition recall test is to measure how a message was encoded by a viewer (Potter and Bolls 2012). In recognition tests, the viewer is asked a multiple choice question about verbal or visual elements of an advertisement. The question contains four choices: one correct verbal and visual answer, and one incorrect verbal and visual. This measures what message elements they have stored in memory. The limitation of this approach is that this assumes the viewer isn't aware of the communication objectives of the message at the time of the test and that the questions need to be written in such a manner that all choices of a question are similar to each other so that they are consistent in quality and content being asked (Krishnan and Chakravarti in Aaker and Biel 1993). Question quality, difficulty and consistency are moderated by a coder.

The advantage of this method is that answers can be coded easily and do not need a coder to assist with the compilation of results. If a modern computer survey programme, such as Qualtrics, is used then answers can be compiled automatically as correct answers can be entered into the survey software at the time of designing the survey.

As television messages contain many different elements, recognition recall can help identify what aspect of a message a viewer found memorable at the time they encoded the message. In relation to pacing or content of a message, it also can indicate what they were able to encode when the message was being viewed. This is important when it comes to understanding the effect of pace and content on memory. Therefore, this measure was used as part of this study.

Post-Test Survey - Qualtrics Survey Software

The post-test survey data was collected using a survey hosted on the Qualtrics website. Once respondents had finished watching the television program and had their psychophysiological data collection finalised they were taken from the Green Room where the experiment was conducted to a row of iMac computers just a few metres away in the same building. These iMac computers when activated automatically opened up to a Firefox browser that had the Qualtrics website with the survey on it already loaded. Participants were not able to navigate away from this page to any other application or site as this functionality had been disabled. All computers were exactly the same in relation to monitors, keyboards and mouse. The study had been designed so that only one person would be completing the post-test survey at a time to prevent any contamination of data.

The initial part of the survey consisted of a series of distractor questions that helped ensure the mind of the participant was clear before they were asked questions relating to recall. The questions asked in this initial part asked about attitudes towards the television show screened in the data collection. After this section, the recall section commenced with the first question being about free or unaided recall based on Lang (1991). Following this, the survey the recognition recall questions were asked. This section featured a series of statements on each advertisement viewed during the session with the respondent being presented with a message queue in the form of a descriptor of the advertisement (the title), and then a sequence of four multiple choice answers related to the advertisement. This was consistent with prior research in the area (Burke and Srull 1988; Keller 1987).

The next section started with questions on cued recall using a screen shot of the advertisement as advocated by Krishnan and Chakravarti (in Aaker and Biel 1993). Viewers were presented with two prompts: "Can you remember anything about this ad?" and, if they had answered this in the positive, then they were asked to "Please

write down all that you can remember". The screenshots included images adverts that were not part of the sample to test for false recall. If a participant had answered negative to the question, they were automatically progressed onto the next question.

The final section commenced with questions on the levels of involvement towards different product categories. They were measured using semantic differential scales for the dummy variable categories of soft drinks, hair care products, long distance phone call services, and banking services. This was followed by the final sequence of questions on political brands for key data of attitudes to the Labor, Liberal and Australian Greens party, the leadership brands of Julia Gillard, Tony Abbott, and Australian Politics. This was based on a modified attitude to brand survey as developed by Schmitt, Pan and Tavassoli (1994).

The final section of the instrument captured political demographics including involvement, political orientation, loyalty levels, and voting intentions for the next Federal election, which were based on the same questions asked by Newspoll in their quarterly political polls. Newspoll are the leading and longest publicly available political poll in Australia.

On completion, participants were thanked and asked to go to the front counter to collect their gift voucher for taking part in the survey.

Programming Effects

Australia's Funniest Home Videos was shown as this was a program that was a popular program during the 2012 TV viewing year that was not a reality or near-reality program that needed to be watched live. The show was originally broadcast on July 14, 2012, nearly six months before the participants viewed it, and had an estimated viewership of 65,000 people in the Perth metropolitan area (OzTam 2012). This duration of time and the format of the show itself of less than 30 second videos, made it unlikely that the show would be remembered by participants if they had watched it. As all participants watched the same show this acted as a control on programming effects. Ethics clearance was another reason why this show was chosen as it was highly unlikely to contain any scenes that could be deemed to be offensive. Finally, there have been no studies on the

relationship between attitude towards the television program and televised political advertisements. This is an area for future research.

Sampling

Sample Size

The minimum requirement for a 95% probability within-subjects sample size is n=64. This allows for population assumptions to be made on a within-subject basis between two factors. As such, this is used as the minimum number for most within-groups sample methodologies. For example, one basic design used frequently is a repeated measures design for which statistically only a Total n of 64 participants is required to be able to compare between two variables and detect a medium-sized effect of the stimuli. However, as the data capture was subjected to variance due to success of the participants in completing the exercise (for example, being eliminated from the sample due to health reasons that affect the psychophysiological measures) and as some participants may elect to withdraw or stop the project for different reasons, or not even show up, the total number of participants recruited was targeted at 90. This allowed for a factor of roughly 40% for a worst case scenario of all of these factors occurring at once.

Sample Recruitment

Sample recruitment was undertaken from the Media Panel database using a random quota-based method to ensure that the results will be generalizable to the Perth metropolitan population as a whole based on age and gender according to the latest 2011 Australian Census. This was 52% female, 48% male in total, and for each age group participants needed to represent 32% for 18-34, 40% for 35-54, and 28% for 55+. The Media Panel participants were compensated for their time and travel with a \$25 Coles Group gift card, per protocols for compensation for this panel. Participants were recruited by phone using preferred contact method details provided by participants from the Media Panel at the ITRIs volunteer panel in Perth (as per HREC 2010/226). These people were recruited initially after expressing an interest in being part of the Media Panel consisted of participants who have consented to take part in physiological measurement procedures (skin conductance and heart rate). The only exceptions will be

those who identify themselves on the TV Panel's pre-session health screening form (see Appendix A-C) that they have a pace maker or other electronic device that might be interfered with by the skin conductance measure, which requires a tiny electric current to be passed through the moisture on a participant's hand. These persons can still participate, but physiological measures will not be collected.

Data Collection Process

Participants from the Media Panel were called and invited to "take part on our next study" (see Appendix A appointment phone call script). If they accepted, an appointment of one and a half hours was made with them. Appointment times ranged from 7:30am till the final appointment at 8:30pm.

On arriving at the Media Panel lab, participants will be given the information sheet for the study and asked to complete the consent form (see Appendix B). Included with this consent form is a physiological screen form (see Appendix C) that alerted the researcher to any participants who were unsuitable for collecting biometric measures for medical reasons or because they had ingested a certain amount of caffeine in the two hours prior to the study commencing. These procedures are standard ITRI protocol that had been approved by HREC over the past six years.

If the participant agreed to participate they were then taken to the Green viewing room, also referred to as the Green Room. The Green Room was a room equipped with a 105cm LCD TV on a low dark wood entertainment unit, a single reclining lounge chair and dim lighting that was set at a level similar to what could be expected in the average lounge room. The room was constructed to be as close as possible to what might be expected in a viewer's room and to make it feel less like a psychophysiological experiment was about to take place. Once the participant was seated and comfortable then the electrodes for the physiological measurements were placed on the participants fingers. The physiological measurements included electrodermal activity (EDA) and heart rate (HR). Electrodermal activity was measured using EDA specific disposable electrodes placed on the first and second fingers on the medial phalanx of the non-dominant hand. Heart rate was measured via pulse photoplethysmography at the distal phalanx of the ring finger of the non-dominant hand.

After this was done the participant was given a final explanation of the study:

"In this study where we are testing how enjoyable it is to watch different types of TV programs. You will view the one hour TV program Australia's Funniest Home Videos. If at any time you wish to end the study or feel any discomfort please raise your hand. At the end of the study please stay seated and I will come in and take you around the corner where you will complete the post-test survey."

Once the participant has no further questions and everything is verified to be working properly, the viewing session begins. The session commences with a black screen with some words asking the participant to sit still whilst preparations are made for the program to start. During this period of about three to four minutes baseline physiological measurements are taken. After these measurements are taken the program commences. The participant completes the viewing session (60 minutes) during which the participant will view the TV content that contains treatment advertisements and control or filler advertisements. For this data collection, the participant will watch an entire episode of *Australia's Funniest Home Video* series, which was selected primarily due to ethical and copyright requirements. During the viewing period, the respondent will experience five ad breaks with the test ads occurring in the first, second, third and fourth ad breaks. The fifth and final advertisement break acts as a distractor period to allow time for the recall measures described above to be conducted in the post-test survey.

There will be four treatment conditions that randomly vary the presentation order of the test ads. The ads will differ on type of content (negative/positive) and pacing (slow/medium/fast), and will be political ads. The fifth and final ad break contains similar filler ads and political ads, but these are not part of the study. The last ad break occupies the 15-minute memory clearance interval between exposure to the last test advertisement and the cued recall task in the post-test survey. When the program ends, the participant completes a short survey on TV program liking and cued brand recall, as explained prior and a copy of which can be found in the Appendix.

Table 3.9: Procedure for Green Room Data Capture

Procedure for Green Room

- Welcome, ensure car pass, bathroom and information/consent forms then electrodes on fingers.
- Walk participant to green room, biopac measures applied to fingers, electrodes connected.
- 3. Select and run DirectRT Andrew.csv file.
- Enter panel number.
 - 5. Walk back to control room, activate measures:
 - a. Biopac andrew's template x 2 click.
 - b. Start recordings.
 - 6. Walk back to green room, activate measures by pressing space bar.
 - 7. At end, wait for thank you screen to come up, then stop measures.
- Go to green room and remove electrodes, press space bar to remove thank you screen.
- 9. Walk participant to survey.
- 10. Finalise at end of survey.
- 11. Pay and sign.

Data Collection Instruments

There are three data collection instruments measures used within the study – two physiological measures during the period of television viewing, and a Qualtrix hosted online survey.

The physiological data was acquired using a Biopac MP150 with appropriate amplifiers (GSR 100C, PPG100C, Biopac, US) using AcqKnowledge software (AcqKnowledge V 4.1, Biopac, US) and the data was stored on a personal computer for later off-line analysis.

Electrodermal activity was measured using skin conductance level (SCL) measured in μ Siemens and also transformed into a change from one second prior (in μ Siemens) to the event to investigate the effect of the specific application on arousal. Prior to quantification, the skin conductance waveform was filtered to remove high frequency artefact caused by lead movement. The artefact in the photoplethysmography signals

was removed after transformation into interbeat interval data. Heart rate per minute was calculated from the interbeat interval of the photoplethysmography signal and also transformed into a change from one second prior (in beats per minute) to determine event specific changes.

Qualtrics Survey (www.qualtrics.com)

Qualtrics is a survey website based in the US, but operates around the world. It is used by over 1300 universities around the world, including several in Australia, such as Murdoch University and the Australian National University. Some of the advantages of Qualtrics over other survey software are that surveys can embed pictures and videos, logic skip functions on questions, randomisation on questions, the ability to collate and analyse data into several different research analysis file formats, such as SPSS, Excel, and the ability to create a basic in-house research report based on the collected data. As this survey software was used at Murdoch University, where the research was carried out, and the Australian National University where the data was analysed, this made it an ideal choice to use for the post-test study.

Linguistic Inquiry and Word Count (LIWC - www.liwc.net)

The Linguistic Inquiry and Word Count Software program helped count the words given by participants on the free and cued recall sections of this report. The LIWC can also perform analysis of the negative and positive emotions in sentences or words, and other types of linguistic analysis, such as casual word use and self-references. Using a this sort of program is beneficial where the analysis required is one of word counts or emotional context of words used, as this can be performed relatively quickly and with minimal error. Whilst it is useful for these types of purposes, it is not able to perform more advanced analysis, such as scoring recall for accuracy against message content or providing analysis of the full content of what was said. However, for the purposes of this research it was an appropriate instrument to use to provide an accurate word count of free and cued recall measures.

Analysis Protocol

The survey, log file and biometric data will be converted into Excel and SPSS data files that will be analysed utilising analysis of variance and non-parametric statistics. Biometric data is first cleaned and analysed in AcqKnowledge and then converted to into Excel and SPSS data files. Video/audio files are only used as back-up resources (for example, to check the log file or calculate distance from the viewing screen). Cued

and free recall results were analysed using LIWC. Results of the analysis are discussed in Chapter 4.

Conclusion

This chapter discussed the theory and background to the methods used to examine and test the research questions this thesis asked in Chapter 2. Firstly, it discussed the methodological approaches of prior studies that had used quantitative and qualitative methods to examine the relationship between the variables that were part of this study: that is pace, valence, memory and advertising and, specifically, political advertising. It then discussed the reasons why each method chosen was necessary to answer the research questions posed.

Next, the pilot study methods and results were discussed. This included the use of the Self-Assessment Manikin (SAM) (Lang 1985) to capture primary emotions and the Geneva Emotion Wheel (GEW) (Scherer 2005) to capture both primary and response emotions using a paper based method of data collection.

Self-report scale measures of pace and valence were also used in the pilot study to confirm the expected findings of an advertisement based on earlier research. The results and findings of the pilot test were then discussed, including some notable findings relating to exchange promises of value and loss, the influence of pre-existing attitudes towards the advertisement and the brand on perceptions of structure and pace, and how negative messages can amplify the effects towards the brand and message by emphasising the structural and content elements of a message.

Finally, the main study methods were described. This included the use of psychophysiological measures of arousal through the use of skin conductance and heart rate measures. Skin conductance is the primary measure due to its higher levels of effectiveness in similar studies and heart rate acts as a confirmatory method of arousal detected by skin conductance. The use of recall to measure memory is also discussed. Recall can be measured by three different methods: free/unaided, cued/aided, and recognition. Each method measures memory at a different level of message processing and, therefore, the use of each is supported in the main study. Sampling methods for the main study are discussed, including the need to ensure that the sample is reflective of the adult Perth metropolitan area so that results can be generalised at the population

level. The technique for finding and contacting research participants is also discussed. The main study data collection process is described in-depth, followed by a description of the instruments used to collect and analyse this data.

CHAPTER 4 RESULTS

Introduction

This chapter outlines the results of the data collected at the Interactive Television Research Institute lab located at Murdoch University in Perth in November and December of 2012. This study consisted of using psychophysiological measures and a post-test survey to examine respondents' emotional responses to televised political advertisements that were built around the seven hypotheses identified in Chapter 2. The methods used to analyse the results from the study include descriptive analysis, analysis of variance using repeated measures ANOVA and analysis of variables using linguistic data processing tools.

Procedure

This study investigated the effect of pacing and valance on responses to political advertisements. The viewing session consisted of six program segments (Australia's Funniest Home Videos) and five ad breaks. The first four ad breaks featured 30-second and these were separated by 30-second filler advertisements. Although advertisement type order was fixed (filler, test, filler, test, filler, test, filler) all placement allocations for each advertisement type were randomly allocated to avoid order effects. The advertisements in Ad Break Five were fixed and not used as test advertisements. The political advertisements were categorised into party (Australian Labour Party/Liberal Party), pace of advertisement (slow, medium, fast), and whether the advertisement was negative or positive. Because all participants saw all advertisements, a within subject design was used that compared the responses to the different types of political advertisements. Additionally, to test the response to a competing preferred political party advertisement, a between-groups analysis was also conducted.

The viewing session content was programmed and presented with stimulus presentation program DirectRT (Version 2008.1.0.13; Empirisoft Corporation, New York, NY). Psychophysiology data was collected in Perth, Western Australia in an individual, as natural as possible, television viewing lab setting. The physiological measurements included electrodermal activity (EDA) and heart rate (HR). Electrodermal activity was measured using EDA specific disposable electrodes placed on the first and second fingers on the medial phalanx of the non-dominant hand. Heart rate was measured via pulse photoplethysmography at the distal phalanx of the ring finger of the non-dominant hand.

Data was acquired via an MP150 with appropriate amplifiers (GSR 100C; PPG100C, Biopac, USA) using AcqKnowledge software (AcqKnowledge V 4.1, Biopac, USA) and the data was stored on a personal computer for later off-line analysis. Electrodermal activity was measured using skin conductance level (SCL) measured in µSiemens and also transformed into a change from 1 second prior (in µSiemens) to the event to investigate the effect of the specific application on arousal.

Prior to quantification, the skin conductance waveform was filtered to remove high frequency artefact caused by lead movement. The artefact in the photoplethysmography signals was removed after transformation into interbeat interval data. Heart rate per minute was calculated from the interbeat interval of the photoplethysmography signal and also transformed into a change from one second prior (in beats per minute) to determine event specific changes.

Sample

Psychophysiology data from 69 participants was used for this study (38 females and 31 males). The number of participants in the specific age groups was not skewed (18-34 n=21, 30.4%; 35-54 n=28, 40.6%; 55 and older n=20, 29%) which is unusual considering the strict health requirements for the psychophysiology sample that required participants to be medication free.

Measurements

The influence of pacing on electrodermal activity and heart rate was investigated with repeated measures ANOVA (pace – slow, medium, fast). The effect of negativity of a political advertisement on electrodermal activity and heart rate was investigated with paired samples t-tests.

Absolute values in which absolute skin conductance level (Arousal Level) and absolute heart rate were analysed. Change from one second prior to the advertisement values (event specific measures) were also analysed. Event specific changes control for individual variability within the physiological data and underlying tonic arousal. For example, even though a person might be relaxed at the end of the session, which would show a decrease in skin conductance level from baseline, there would still be an increase in change from one second prior whilst the participant is viewing an arousing advertisement

Results Overview

Data were analysed using the within subjects approach of the repeated measures ANOVA with a Huynh-Feldt epsilon correction when the assumption of sphericity was violated. There was no difference in absolute skin conductance during the political advertisements regardless of voter preference for each party when compared to the resting baseline (Main effect F(1.11, 63.49)=1.74, N.S., η_p^2 =.03; ad type x voter preference interaction effect F(2.23, 63.49)=.51, N.S., η_p^2 =.02). The Liberal Party ads evoked a slower heart rate in all participants (main effect F(1.32, 60.73)=3.85, p<.05., η_p^2 =.08) but this effect was not moderated by political party preference (interaction effect F(2.64, 60.73)=1.28, N.S., η_p^2 =.05).

As explained in chapter 3, recall testing is done using three methods: free/unaided, cued/unaided and recognition. Free/unaided and cued/unaided is done using either the main method of a word count or the least favoured method of a score of advertisement features recalled. Recognition recall is done through a multiple-choice test on the verbal and visual features recalled, which is randomized and inserted amongst questions on filler advertisements and false advertisements, or advertisements that were not screened but are similar to the product categories of ones that were.

Event Specific Measures

Skin conductance decreased from the second prior to the related advertisement in the opposing voters but this finding was not significant (interaction effect F(2, 56)=2.34, p=.11, η_p^2 =.077). Those participants that preferred other political parties other than Labor or Liberal had a reduced heart rate during the Liberal Party advertisements, but an increased heart rate during the Labor advertisements (interaction effect F(2, 46)=3.21, p=.05, η_p^2 =.12).

Pace

Absolute skin conductance level did not differ between baseline and any of the levels of pacing. There were no significant differences in absolute skin conductance level (F(1.24, 83.06)=.8, N.S., η_p^2 =.01). Heart rate significantly decreased from baseline (F(2.11, 116.02)=5.48, p<.05., η_p^2 =.09) in all levels of pacing, but they did not differ from each other (slow vs med – p=.11; med vs fast – p=.24; slow vs fast – p=.86).

Although there were no overall main effects of pacing on event specific arousal (F(1.54, 101.76)=2, N.S., η_p^2 =.03), there was a trend of the medium-paced advertisements evoking a decrease in arousal when compared to the slow-paced advertisements

(p=.068). There was no effect of pacing on event specific heart rate changes (F(2, 110)=.43, N.S., η_p^2 =.01).

Negative versus Positive Advertisements

Absolute skin conductance level did not differ between baseline and the positive or the negative political advertisements (F(1.22, 81.88)=.97, N.S., η_p^2 =.01). There was a trend of the positive advertisements evoking a greater absolute skin conductance level than the negative advertisements (p=.093). Heart rate significantly decreased from baseline (F(1.31, 72.14)=7.95, p<.05., η_p^2 =.13) in both the positive (p=.046) and the negative (p=.001) political advertisements and heart rate significantly decreased more in the negative political advertisement when compared to the positive political advertisement (p=.005).

There was a trend of the positive ads to evoke a greater event specific arousal than the negative ads (F(1, 66)=3.14, p=.08, η_p^2 =.045) although this finding was not significant. There was no effect of positivity or negativity on event specific heart rate changes (F(1, 55)=.06, N.S., η_p^2 =.001).

Overall, the physical responses from the data set are not consistent with expectations and projections from the literature. Negative images and words should generate higher levels of arousal (Lang, Newhagen and Reeves 1996, Bradley, Angelini and Lee 2007), and positive images that are pleasant and arousing can also show increased arousal rates, although this effect is more due to the effect of images that may remind the viewer of positive life experiences or erotic images (Cacioppo, Tassinary and Berntson 2007).

This will be explored further in Chapter 5.

Hypothesis Testing

The following section outlines the results of the specific hypothesis testing.

Hypothesis 1: Negative political advertisements will be better recalled than positive political advertisements

Hypothesis 1 is tested by examining the average number of words used to recall an advertisement in the free recall section of the post-test survey. This is consistent with the prior studies of Lang et al. (1999) and Bolls, Muchling and Yoon (2003) who used summed totals, n-values and word counts to determine differences in recall rates for advertisements. Recall of advertisements was conducted using three main measures:

free recall (brand and message), aided recall and recognition recall (visual and verbal). These enable the measurement of the two main different types of recall, free or unaided and aided recall based on visual and verbal recognition of elements of the advertisements. Recall itself measures brand name (brand recall), and content and message structure (message recall).

For free recall this is done by analysing the number of times a brand is recalled (brand recall) and for message recall by the number of words mentioned about a message itself, and what aspect of the message was recalled more than others.

Free recall measures for these advertisements was measured by the number of words per advertisement recalled by a participant. Table 4.1 outlines the average n-count of the words demonstrating that negative ads received higher rates of recall than positive ads.

Table 4.1: Mean Recall for Negatively Coded and Positive Coded

Valence	Number of Ads	Mean Free Recal	
		N (words)	
Negative	6	21.8	
Positive	6	9.2	

On the basis of the recall data, Hypothesis 1 is confirmed. This is consistent with the expectations of the literature (Brians and Wattenburg 1996; Roberts 1995; Shapiro and Rieger 1992; Lang 1991; Lemert et.al. 1991; Merritt 1984)

Hypothesis 2: Political advertisements that are more arousing will have higher rates of recall

Hypothesis 2 is tested across four measures: free or unaided recall, cued or aided recall, recognition recall and mean EDA (Bolls et al.2003, Bradley, Angelini and Lee 2007). Average skin conductance measures for each advertisement were calculated based on word count values for the free recall section were calculated using Linguistic Inquiry Software. Manual counts were used to identify the brand recall measures within the free recall data.

Cued recall was measured using the total number of words based on a modification of the Bolls et al. (2003) and Burke and Srull (1988) studies. Recognition recall was based on a true/false answer to the display of verbal and visual information from the advertisement. Means of the score are reported in accordance with prior works of Lynch and Srull (1982).

A rank order table (Table 4.2) was created to present predictions as to the order of word count totals predicted by the difference in EDA/GSR measures. This showed that there was a noticeable variation between actual rank and predicted rank. Whilst the top advertisement, Fast Neg ALP, was ranked first on predicted and actual measures, nearly all the other advertisements had significant variance from predicted to actual rank.

Table 4.2: List of High Arousal Advertisements by Mean EDA

Pacing, Valence Brand	Title	Mean EDA	Unaided Recall (Word n count)	Cued Recall (Word n count)	Recognitio n Recall – Verbal (% correct)	Recognition Recall – Visual image (% correct)	Recognitio n Recall – Visual words (% correct)
Slow Pos Lib	Stand Up for Real Action 2	5.147	28	525	21.7		13
Fast Neg Lib	It's the Same Labor	5.090	23	546	44.1	39.7	
Med Pos ALP	Julia Gillard – Let's Move Australia Forward	4.995	0	693	19.1		26.5
Fast Pos ALP	Julia Gillard - Strengthe ning Our Economy	4.979	0	730	31.5		50.7
Med Neg Lib	Kevin Rudd's Bag of Tricks and Excuses	4.918	38	493	32.9		27.1

Med Lib	Pos	Support Real	4.912	0	495	39.7		51.5
		Action with Tony Abbott			1 1 mm			
Slow	Pos	Househol d Assistanc e Package - Families	4.687	2	502	20.3		62.2
Slow	Neg	Taking Australia Backward s	4.660	0	325	40		37.1
Med ALP	Neg	Tony Abbott Can't Manage the Economy	4.595	14	625	31.9		37.7
Fast Lib	Pos	Go for Growth – Howard 07	4.356	25	294	48.6		21.4
Slow Lib	Neg	Angry Anderson is Fed Up with Labor	4.253	18	868	52.1	25.4	
Fast ALP	Neg	Tony the Dinosaur by Harrie, Aged 11 Years Old	4.201	38	902	N/A	27	15

Therefore, there is no significant relationship between arousal and recall. The advertisement with the highest mean EDA had the third highest unaided recall rates, but only medium ranking on aided recall and lowest scores on recognition recall. The highest recall advertisement by word count on unaided and aided recall was the least arousing advertisement — "Tony the Dinosaur". The second best aided recall

advertisement was second last on arousal –"Angry Anderson is Fed Up with Labour". The rank ordering is presented in Table 4.3.

Both the top three and bottom four ads on arousal all come from different pace and valence types with no correlation between arousal and recall scores, showing that this hypothesis is not supported.

Table 4.3: Hypothesised Order versus Actual rank order

Pacing,	Title	Mean	Unaided	Unaided	Unaided
Valence	of our private and in the	EDA	Recall	Recall	Recall
Brand			(Word n	Actual Rank	Predicted Rank
			Actual		
Slow Pos Lib	Stand Up for Real Action 2	5.147	28	2	6
Fast Neg Lib	It's the Same Labor	5.090	23	4	1
Med Pos ALP	Julia Gillard - Let's Move Australia forward	4.995	0	8	4
Fast Pos ALP	Julia Gillard - Strengthening Our Economy	4.979	0	8	2
Med Neg Lib	Kevin Rudd's Bag of Tricks and Excuses	4.918	38	1	3
Med Pos Lib	Support Real Action with Tony Abbott	4.912	0	8	4
Slow Pos ALP	Household Assistance Package - Families	4.687	2	7	6
Slow Neg ALP	Taking Australia Backwards	4.660	0	8	5
Med Neg ALP	Tony Abbott Can't Manage the Economy	4.595	14	6	3
Fast Pos Lib	Go for Growth - Howard 07	4.356	25	3	2
Slow Neg Lib	Angry Anderson is Fed Up with Labor	4.253	18	5	5
Fast Neg ALP	Tony the Dinosaur by Harrie, Aged 11 Years Old	4.201	38	1	1

Hypothesis 3: There will be a significant interaction between valence (negative/positive) and pace (slow/fast) such that fast negative advertisements will have a better recall than slow advertisements.

To test the interaction between valence and pace recall tests are used, as a fast negative advertisement will use more attentional resources than a slower positive advertisement (Lang et al. 1999). As such, a respondent should be able to recall more attributes of a fast-paced negative commercial than a slow-paced positive or negative message. This is measured across different recall tests, as there may be a point where the respondent may reach their capacity for message processing, and thus may only remember either verbal or visual elements of the messages only (Lang et al. 1999; Lang 2000).

Hypothesis testing was conducted using regression analysis on the recall results. However, no statistically significant results were recorded. The recall tests show no significant interaction between valence and pace. Slow positive advertisements were not better remembered than faster negative advertisements. Both positive and negative valence ads recorded 12 mentions a piece of 24 free recall mentions.

Fast-paced negative advertisements had the highest rates of recall on the free recall measures, with the two ads in this category recording recall rates of three mentions each. Slow-paced positive advertisements were the next with the three advertisements in this category recording an average of 1.7 recalled mentions each.

However, on recognition recall tests slow-paced advertisements had higher rates of recall for visual -words) than other types of messages, with 37.1% recall for slow-paced negative compared to 42.2% for slow-paced positive advertisements. The highest rates of verbal recall were for fast positive advertisements at 46.7%, followed by slow negative ads at 46.1%. Fast negative advertisements had the highest rates of visual (images) recall than other types of advertisements, recording 32.6% recall with the next being slow negative at 25.4%.

Hypothesis 4: There will be a significant interaction between valence (negative/positive) and arousal such that negative advertisements will have higher arousal than positive advertisements.

To the test the interaction between the different types of valence and arousal scores of each type, a repeated measure of analysis of variance was used (Bolls, Muehling and Yoon 2003, Lang et al. 1999). There was no difference in absolute skin levels between negative and positive ads (F(1.21, 81.22)=.97, N.S., η_p^2 =.01). There was a trend of the

positive advertisements evoking a greater absolute skin conductance level than the negative advertisements (p=.093).



4.65 4.60 4.55 4.50

Figure 4.1: Absolute Skin Conductance Level in µSiemens Negative v Positive

Figure 4.1 shows the lack of interaction between valence and arousal. To support an interaction, negative arousal should be higher than all other types of advertisements and that of the baseline. Here it demonstrates an inverse in that relationship, which indicates that further study is required to understand the interaction being demonstrated here.

■ Negative

■ Positive

Filler

Baseline

Figure 4.2: Positive v Negative, Absolute Heart Rate in Beats per Minute

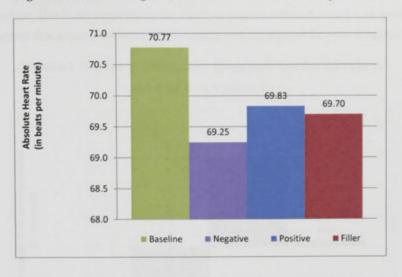


Figure 4.2 reinforces the findings from Figure 4.1 that there is no interaction between valence and arousal to support the hypothesis that negative advertisements have greater arousal than positive advertisements. Again, it would be expected that negative advertisements would have higher levels of heart rates than all other types of advertisements and that of the baseline measurement.

Heart rate significantly decreased from baseline (F(1.42, 78.1)=6.91, p<.05., η_p^2 =.112) in both the positive (p=.046) and the negative (p=.001) political advertisements and the filler advertisements (p=.025) and heart rate significantly decreased more in the negative political advertisement when compared to the positive political advertisement (p=.005).

There were no significant effects of valence of political advertisement on event specific arousal (F(1.87, 123.35)=1.23, N.S., η_p^2 =.018). There was no effect of positivity or negativity on event specific heart rate changes (F(2, 110)=.11, N.S., η_p^2 =.002).

Finally, Figure 4.5 analyses the difference in arousal from 1 second prior to that of the commencement of the message, an important indicator of arousal as with a new message and content being displayed in the first second of a message there should be a change in the respondents arousal that should support an interaction effect between valence and arousal in favour of negative messages increasing arousal. There should be

a higher positive change for negative messages than all other types of messages and the baseline. This is not supported by the results as positive messages record a far greater increase than negative messages, which actually record a negative decrease in arousal.

Figure 4.3: Negative v Positive, EDA change from Last Second Prior to Advertisement in μSiemens

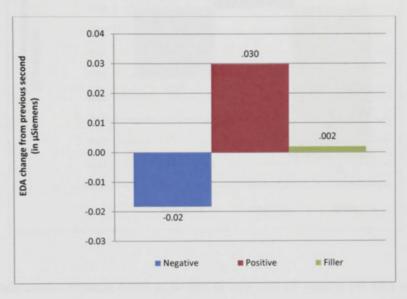
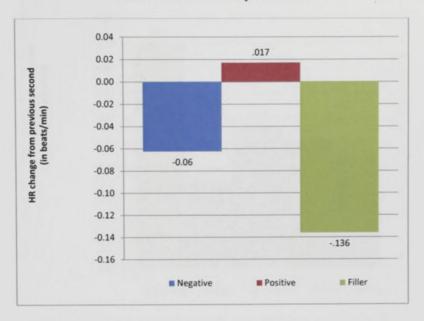


Figure 4.6, which examines the change in heart rate for one second prior, also supports this finding.

Figure 4.4: Negative v Positive, HR Change from Last Second Prior to

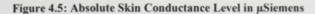
Advertisement in Beats per Minute

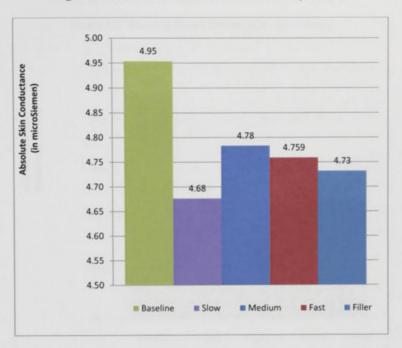


Only positive messages record an increase in heart rate, yet negative and filler ads recorded negative changes in heart rate from one second prior. Therefore, these findings reject Hypothesis 4.

Hypothesis 5: There will be a significant interaction between pace (slow/medium/fast) and arousal such that slower advertisements will have lower arousal levels than faster advertisements.

To the test the interaction between the different types of pace and arousal a repeated measure of analysis of variance was used (Bolls, Muehling and Yoon 2003, Lang et al. 1999). Figure 4.5 indicates that absolute skin conductance level did not differ between baseline and any of the levels of pacing (F(1.24, 83.06)=.82, N.S., η_p^2 =.012).





Similarly, Figure 4.6 illustrates that heart rate significantly decreased from baseline (F(2.22, 122.14)=5.04, p<.05., η_p^2 =.084) in all levels of pacing and the filler ads but the levels of pacing did not differ from each other (slow vs med – p=.11; med vs fast – p=.24; slow vs fast – p=.86).

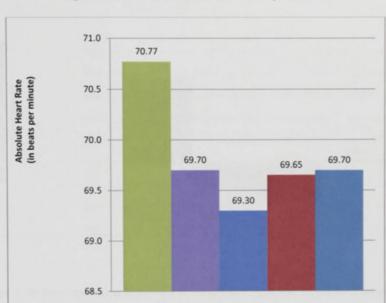


Figure 4.6: Absolute Heart Rate in Beats per Minute

For event specific measures, although there were no overall main effects of pacing on event specific arousal (F(1.96, 129.65)=1.71, N.S., η_p^2 =.025), there was a trend of the medium-paced advertisements evoking a decrease in arousal when compared to the slow-paced advertisements (p=.068) as illustrated in Figure 4.7.

■ Slow

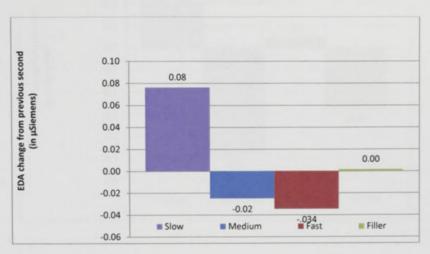
■ Baseline

■ Medium

■ Fast

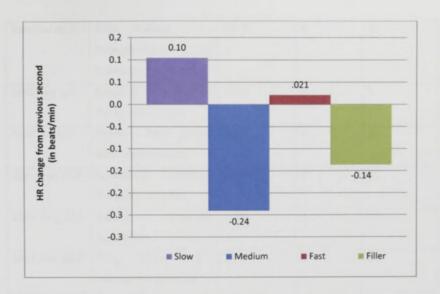
Filler

Figure 4.7: Interaction between Pace and Arousal, EDA Change from Last Second Prior to Advertisement in µSiemens



Again, the data reported in Figure 4.8 illustrates that there was no effect of pacing on event specific heart rate changes (F(3, 165)=.34, N.S., η_p^2 =.006).

Figure 4.8: HR Change from Last Second Prior to Advertisement in Beats per Minute



Overall, the data for skin response and heart rate did not support Hypothesis 5.

Hypothesis 6: There will be a significant interaction between pace (slow/medium/fast) and between valence (negative/positive) that will influence arousal such that slower positive advertisement will have lower arousal than faster negative advertisements.

The highest advertisement on arousal was a slow positive advertisement. A fast negative advertisement was second on arousal and a medium positive advertisement was third most arousing.

Table 4.4: Interaction between Pace and Valence, Actual and Predicted

Category	Title	Mean Arousal	Actual Arousal Rank	Arousal Rank
Slow Pos Lib	Stand Up for Real Action 2	5.147	1	6
Fast Neg Lib	It's the Same Labor	5.090	2	1
Med Pos ALP	Julia Gillard – Let's Move Australia forward	4.995	3	4

Fast Pos ALP	Julia Gillard - Strengthening Our Economy	4.979	4	2
Med Neg Lib	Kevin Rudd's Bag of Tricks and excuses	4.918	5	3
Med Pos Lib	Support Real Action with Tony Abbott	4.912	6	4
Slow Pos ALP	Household Assistance Package - Families	4.687	7	6
Slow Neg ALP	Taking Australia Backwards	4.660	8	5
Med Neg ALP	Tony Abbott Can't Manage the Economy	4.595	9	3
Fast Pos Lib	Go for Growth - Howard 07	4.356	10	2
Slow Neg Lib	Angry Anderson is Fed Up with Labor	4.253	11	5
Fast Neg ALP	Tony the Dinosaur by Harrie, Aged 11 Years Old	4.201	12	1

Use of regression analysis on the data produced no significant results. This hypothesis is not supported from the results.

Hypothesis 7: Party preference, as measured by House of Representatives voting behaviour, will influence arousal to advertising such that when advertisements are shown from the political party preferred by the respondent there will be an increase in arousal.

Party preference was measured by preference towards the party that forms government, in this case in Australia in the House of Representatives. Party loyalty may not be representative of actual preference if an election were held that day because a voter may have chosen differently at that election due to different reasons. This is why party preference in the house that forms government was used

There was no difference in absolute skin conductance during the political advertisements regardless of voter preference for each party when compared to the resting baseline (Main effect F(1.11, 63.41)=1.73, N.S., η_p^2 =.03; ad type x voter preference interaction effect F(2.23, 63.41)=.46, N.S., η_p^2 =.02) (Figure 4.9)

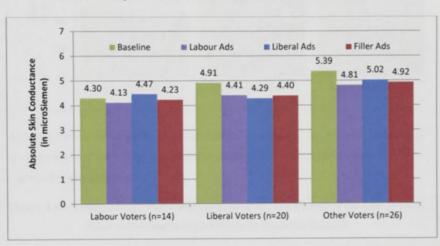
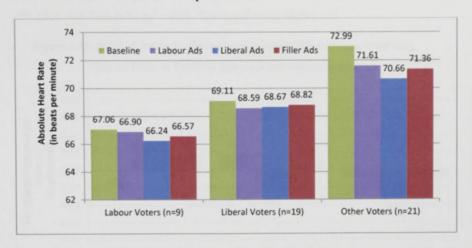


Figure 4.9: Political Party Preference and Arousal Levels. Arousal level as Measured by Absolute Skin Conductance Level in uSiemens

Liberal Party advertisements evoked a slower heart rate in all participants (main effect F(1.45, 66.78)=3.33, p=.057., $\eta_p^2=.067$), but this effect was not moderated by political party preference (interaction effect F(2.9, 66.78)=1.14, N.S., $\eta_p^2=.05$) (Figure 4.10).

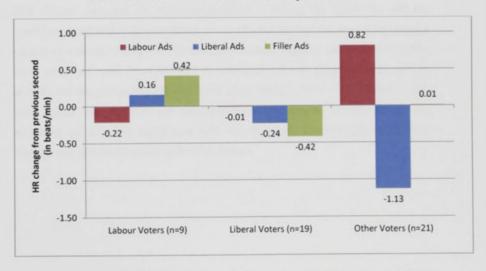
These results are confirmed by the heart rate findings for one second prior (figure 4.11). These show that filler ads have the highest change; however, amongst other voters there is a significant decrease in heart rate for Liberal Party messages, which is indicative of a decrease in arousal and attention towards these messages. Most of these other voters had indicated a preference for the Greens, 83% of whom preferenced Labor as their second choice, based on the 2013 federal election results from the Australian Electoral Commission (Green 2013). Therefore, this change noted in these results is consistent with voting behaviour from past elections.

Figure 4.10: Political Party Preference and Arousal: Absolute Heart Rate in Beats per Minute



Although these results should be interpreted with caution as the between groups cell sizes are uneven, there is no demonstrable difference in voter response based on prior expressed voting preference.

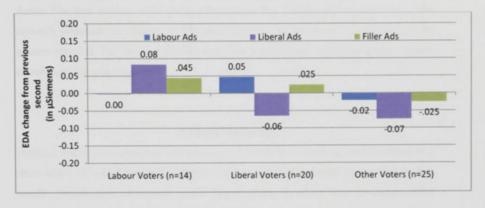
Figure 4.11: Political Party Preference and Arousal: HR Change from Last Second Prior to Political Advertisement in Beats per Minute



Skin conductance decreased from the second prior to the related advertisement in the opposing voters, but this finding was not significant (interaction effect F(3.55,

99.46)=1.27, N.S., η_p^2 =.043). There was no effect of voter preference on event specific heart rate changes during particular party advertisements or the filler ads (interaction effect F(4, 92)=1.96, N.S., η_p^2 =.079). This is outlined in Figure 4.12.

Figure 4.12: Political Party Preference and Arousal: EDA change from Last Second Prior to Political Advertisement in μSiemens



As a result of the skin conductance and heart rate data, Hypothesis 7 is rejected.

Conclusion

This chapter discussed the procedure involved in testing the hypotheses and the conditions under which the experiment was conducted. Hypotheses were tested using a variety of methods appropriate for analysis including repeated measures ANOVA's, recall tests, and word count analysis. A variety of software programs were used in analysis including Linguistic Inquirer Word Count (LIWC), SPSS and Microsoft Excel. After testing the hypotheses and analysing the results, only the first hypothesis was supported. All the other hypotheses were not supported. The implications of these findings will now be discussed in the next chapter.

CHAPTER 5 CONCLUSION

Introduction

Chapter 5 presents a discussion of the findings, conclusions and implications of the thesis. The first section of the chapter focuses on the findings and conclusions of the research presented in chapter 4. The next section focuses on the limitations of the present research. The final section discusses the implications of this research for future researchers and practitioners.

Political Marketing

Political marketing campaigns aim to maximise recall of the message and the brand in a short space of time. Structural elements that can aid in this would be any feature that would provide new information to the viewer which, therefore, must be processed by the mind as part of the attention priority procedure of the brain, and is thus more likely to be recalled than a message without these characteristics. Prior research (Lang 1991; Bradley, Angelini and Lee 2007; Bradley, Molls and Yuehling 2003) has identified that the best structural component to use in this context is pacing, or number of cuts in a message. Cuts are defined as every time the existing scene ends and a new scene is presented. The number of cuts, also known as pacing (short 0-3, medium 4-10 and fast, 11 plus) help determine how much information in a message a viewer is exposed to. The faster a message is, the more information that must be processed, the more that attention must be paid to the message, but also the more the viewer's capacity for message processing is taken up. This combined with the type of valence in a message can, therefore, alter not just the amount of information the viewer sees, but also how the viewer may emotionally respond to such a message and, therefore, how they may perceive the brand and the message. Attitude towards the message and attitude towards the brand are important influences on the final purchase decision made by a consumer as they affect how the consumer ultimately perceives the promise of exchange being communicated to them by the brand.

This leads to the central research questions of this thesis: what promise of exchange has higher recall from voters: the promise of value or the promise of loss? And What combination of pacing and valence is the most effective to use in a political marketing

campaign that can achieve recall and favourable emotional response from the market that will positively influence their perception of the promise of exchange being offered to them by the brand of their preference?

To test these research questions, a study was undertaken at the Interactive Television Research Institute at Murdoch University in Perth, Western Australia which offered the most realistic setting for a study of this type. Psychophysiological measures of skin conductance (electro dermal activity or EDA) and heart rate were used to measure emotional responses to media in "real time". This enabled the measurement of emotional responses to different advertisements. Participation was voluntary and participants were selected at random from the Perth Media Panel database made up of Australian citizens aged over 18 from the Perth Metropolitan area. Participants were shown a one hour program, Australia's Funniest Videos, which had the same number of advertisement breaks that they would watch if they were to watch the program at home. The sample advertisements, one from the Labor Party and one from the Liberal Party of each variable of pace (slow/medium/fast) and valence (negative/positive) were selected at random into the ad break, never appearing as first or last message to control for recency effects, and spaced by filler messages from a range of product categories. Seventy one usable participants made up the final sample, which was an accurate sample on age and gender of the Perth Metropolitan area. This was followed up by a post-test recall survey that measured three different types of recall: free/unaided, cued/aided and recognition.

The findings showed that whilst the negative messages were better recalled than the positive messages, they did not produce higher levels of emotional response than the other messages shown. They also did not produce higher levels of emotional response from those that preferred the sponsoring brand, in other words there was no difference in arousal from a consumer of a brand regardless if the message being shown by that brand was positive or negative. Recall of messages was also not dependent upon pace or valence.

Whilst there were limitations with this research, the implications of these findings are that, consistent with earlier research findings in psychophysiology, negative political messages are better recalled than other types of political messages. However, viewers do not have higher levels of emotional responses to a negative commercial than a positive one, even if they support the sponsoring party. Pace is not a significant factor to

how much information is recalled about a political message in this context; however, further research would be required to better understand the role of pacing in impacting recall of political messages of different types (for example claim v non-claim information). What is certain is that negative advertising's effectiveness as the primary method for political communications needs to be reconsidered in light of these findings by both practitioners and academics alike.

Further research should consider how attitudes towards the message and brand are being influenced by other variables that constitute television advertising. The use of psychophysiological methods to study political communications will help further understand the relationships between the variables that make up political television advertising and how they affect voting behaviour in both the short, medium and long term. This chapter now outlines the findings and results for each research question and hypothesis individually.

Research Question 1

Exchange is the core of political marketing, however, unlike commercial marketing, this exchange can be both the promise of loss and the promise of value. Whilst commercial marketing exchange has evolved following Vargo and Lusch's (2004, 2012) re-examination of the exchange paradigm as being an exchange of value from the two actors involved in the exchange, political marketing exchange can be for either value or loss. For example, example voting for party A, who stands little chance of winning the election, is still a better option than voting for party B who does but may not offer any perceived value to the voter. When applied to the political marketing context, as was done in this thesis, it can help explain why there is a need to understand which value proposition is better able to be communicated to the market: the promise of exchange for value or the promise of exchange for loss.

As negative advertising is the single most dominant form of political advertising in both static (print and outdoor) and dynamic (radio, television and the internet, including social media) resolving this question has important implications for both research and practitioners. This leads to the first central research question.

What promise of exchange has higher recall from voters: the promise of value or the promise of loss?

That is, should a political party or candidate communicate an exchange of loss through negative advertising as a way of stimulating fear, doubt or concern over this loss with the voter? In practical terms, will the negative message outweigh any competing promise of gain communicated in the form of positive advertising? Essentially, the political marketing framework asks if negative advertising creates a more viable emotional arousal with the target market than positive advertising. If so, does the promise of loss lend itself to being better recalled than a promise of gain?

Political advertising differs to commercial applications insofar as politics involves the communication of an exchange of value and exchange of loss by the same brand in the same campaign. In addition, political advertising is primarily used during election periods only. This means that unlike commercial brands that can achieve communication objectives over a longer period using integrated forms of communication, political campaigns must achieve outcomes in a competitive message environment in a relatively short time frame. This makes methods that can achieve recall of the promise of value with voters the most effective.

Negative messages have higher recall above other types of messages due to the ability of negative content to increase emotional arousal in viewers, and to generate the "flight or fight" response of viewers. As negative messages require risk assessment and threat evaluation responses, individuals allocate increased attention processing resources in order to classify advertising, and this, in turn, results in increased recall of the message due to increased involvement with the message. In contrast, positive messages are less likely to be allocated the same message processing resources unless there is something about the content or structure that makes the message remarkable or connected to a life experience (Cacioppo, Tassinary and Berntson 2007). Further, as the structural features of television advertisements can change the perception and attitude towards a message by how content is presented, if their use is consistent with the content, it can help achieve message objectives, such as recall. From a communications theory perspective, this justifies the use of negative content as the dominant advertising type in politics where short term message recall is valued over longer term processing. Within the thesis, the effectiveness of the negative messages was supported by the results of Hypothesis 1.

Given message recall is a critical objective in political marketing due to the short space of time most campaigns have to achieve communications objectives, political marketers

place a higher value on message recall over brand recall (Baker et al. 1986). This is based on the assumption that most consumers are already familiar with the key political brands in the market and, therefore, recall needs to focus more on message features. Within this framework, one of the central structural features that can be used without affecting content of a message are changes of scene. This is based on research finding that scene changes (cuts) are treated as new information to be processed by the viewer.

As a result, an advertisement with many cuts will effectively be processed in a similar manner by the viewer as a negative advertisement, thus increasing involvement, and theoretically resulting in greater recall. Although the principle of limited capacity for message processing means that not all of this information will be processed, a viewer should still retain enough information about the message to have it affect their brand preference formation (Lang 2000). As a viewer is exposed to more information during a faster-paced messages this increases arousal as the viewer will allocate more attention resources to processing the information in the message, increasing their heart rate and emotional arousal, until such time that they reach their limit for message processing (Lang 2000)

However, when combined with the valence of a message this should mean that a fastpaced negative content message should have a higher rate of recall than other types of messages. This would mean that if a political brand wanted to achieve high rates of recall of their message, then they need to use a fast-paced negative advertisement to do so. It should mean that an advertisement that is slow and positive should achieve less recall than a negative commercial.

Research Question 2

The other important issue is that the message needs to have a positive impact on voters and either change or strengthen their brand preference. As Rossiter and Bellman (2007) note an advertisement that aims to be informative or transformative needs to create emotional arousal to incite a consumer to act on it. Without that emotional arousal, it is unlikely a consumer will feel the need to act on the content in the message by either purchasing the brand or changing their brand preference. Therefore, a message from a brand that is preferred by a voter should generate higher arousal and recall of that message, especially when combined with promises of value that either should be

appealing to that voter or carrying promises of loss for those that do not support that brand. A message from a competing brand should have the opposite effect.

Therefore, the elements of pacing and valence when combined with the content of the message lead to the development of the final research question that this research will address:

What combination of pacing and valence is the most effective to use in a political marketing campaign that can achieve recall and emotional response from the market? And which type of message will influence their perception of the promise of exchange being offered to them by the brand of their preference?

Hypothesis 1: Negative political advertisements will be better recalled than positive political advertisements

In this study, respondents had a mean recall of 21.8 words per advertisement, but only 9.2 words were recalled for positive commercials, which reinforces the findings of previous literature. The findings on this hypothesis supported the existing literature that negative advertisements would be better recalled than positive advertisements. Existing literature in political advertising (Basil, Schooler and Reeves 1991; Johnson-Cartee and Copeland 1989; Kahn and Kenney 2000; Lang 1991; Newhagen and Reeves 1991 in Kaid 2004) supported the theory that political advertisements containing primarily negative content (images, words and sounds) would be better recalled than positive messages.

Literature in communication research also supported this notion (Cacioppo, Tassinary and Berntson 2007, Nabi 1999, Newhagen and Reeves 1992), as negative content is processed as a higher priority than other content due to the inbuilt fight or flight response that all humans possess. This, therefore, makes negative content more likely to be recalled as more attention and memory resources have been allocated to the processing of these messages compared to positive advertising. The results of hypothesis I support the first research question.

Hypothesis 2: Political advertisements that are more arousing will have higher rates of recall

Hypothesis 2 was tested across the three main types of recall used in advertising: free/unaided, cued/aided and recognition. The findings from this research were that

there was no relationship between arousal levels and rates of recall and, therefore, the hypothesis was not supported.

These findings are in contrast to existing research in advertising and communications which show that commercials with high rates of arousal have higher rates of recall than commercials with lower rates of arousal. Bradley et al. (1992) seminal study on static images relationship with arousal and pleasure in memory found that as self-reported measures of arousal increased so did memory of images. Lang, Dhillon and Dong (1995) found that if they controlled for valence, then the higher the arousal of the message the higher the levels of recall of a message. Extending these findings, Lang et al. (1999) found that cued recall was higher for arousing messages than for calm messages, but recognition increased as arousal levels decreased, but this was linked into pacing of messages. Newell, Henderson and Wu (2001) found that contrary to the existing intensity theory on advertising, as arousal increased so did memory recall of messages.

However, as Newell, Henderson and Wu (2001) hypothesised from their findings, these results may indicate that arousal to a message is subject to a wider range of discrete variables than those just in the message itself and, therefore, can occur at any time. This could also be related to the theory, of Cacioppo, Tassinary and Berntson (2007), that if a message has in it something that is closely linked to a life event or experience of the viewer, then it is more likely to be remembered as the image will increase arousal.

Yet, if a negative message can achieve higher rates of recall than a positive one as it has more arousal, and if a fast-paced message also increases arousal due to the attention and processing resources required when viewing this message, this should mean that a fast-paced negative commercial should have the highest rates of arousal and recall, but this study does not support those findings.

These findings indicate that how a political advertisement arouses emotions in a consumer, and how that arousal is linked into recall of the message and the brand, is still not yet fully understood. A message that is arousing may also produce a range of cognitive emotions that may lead to a voter to alter their preference or dislike the advertisement and worse, the brand supporting the message.

So any political advertiser that uses valence to achieve recall should prefer positive messages over negative messages as positive messages are just as likely to create

arousal in a consumer, as Lang, Dhillon and Dong (1995) noted, but less likely to lead to a negative attitude to the advertisement or brand. As Lang (1991) noted although political advertising is a unique subset of integrated marketing communications, it is not part of it. Attitudes towards political advertisements can, in and of themselves, already lead to heightened levels of arousal in most people when they first see the message appear due to the dislike many have for most forms of political communications. Considering how few negative advertising messages and images consumers are exposed to, yet are still able to be aroused by some, demonstrates that creating arousal in political advertising should only be done in such a way as to develop liking towards the advertisement and brand so that consumers are more likely to recall the attributes and key benefit of the message in a positive way, which impacts favourably upon brand attitude, liking and preference.

Hypothesis 3: There will be a significant interaction between valence (negative/positive) and pace (slow/fast) such that fast negative advertisements will have a better recall than slow positive advertisements

The results from this study showed no relationship in political advertising between valence and pace. This is in contrast to the prediction that fast negative advertisements will have better recall than slow advertisements, and in contrast to prior commercial advertising and communications research. This presents an opportunity for further research to attempt to replicate this study on political advertising content to determine if there is a discrete category of non-commercial advertising which does not follow the existing commercial theory. The results of this hypothesis may indicate that political advertisements of any type are not subject to the same interaction effect as noted by Lang et al. (1999).

Bolls, Muehling and Yoon (2003) found that non-claim related information (background, scenery, music) had higher recall than claim-related information (copy/message/key benefit) in fast-paced advertisements. The recognition recall test results did not support this finding. The highest visual content elements of the message related only to visual information that was primarily non-claim related in all types of pace. One possible reason for these findings is that touched on by Yoon, Bolls and Muehling (1999) from the conclusion of their earlier research into pacing, arousal and involvement. They mentioned how involvement levels with the advertisement can moderate the effects of pacing and arousal on a viewer. In this case the involvement

level with politics of most people is very low, if not negative towards the politics product class.

Fox, Park and Lang's (2007) study into the relationship between cognitive overload and structural complexity and informationally dense messages also indicates that when the capacity for message processing is reached, a viewer will switch resources from the primary task of processing the message to secondary tasks. In a political application this would mean that if a message were to contain too much information that required too much processing to analyse it, then a viewer would stop processing the message and focus on other tasks. This would mean that most of the message content would be lost on a viewer. This effect would be exacerbated if a message would be fast-paced as the effect would happen sooner.

The implications from these findings for both researchers and practitioners is that involvement levels with politics needs to be taken into consideration before designing any message, keeping in mind that the attitude towards a political advertisement will be far different to that of a normal commercial advertisement for a low involvement product, such as detergent or cereal.

Creating a fast-paced negative message when there already exists a low involvement or negative involvement with the product, and an existing negative attitude towards the advertisement due to past experiences, means that the opposite results will be found by practitioners than what theory might suggest, as this study found. Practitioners would be advised to use slow-paced positive messages as this may help counter any negativity towards the brand and start to build more positive attitudes towards the advertisement, a point also noted by Yoon, Bolls and Muehling (1999).

For researchers, further study needs to be undertaken into the relationship between the involvement levels with politics, attitudes towards the advertisement, and structural and content elements of political messages. Whilst this work has been started by this research and earlier work by other researchers, much still needs to be done to fully understand how these elements interact with each other in the minds of the voter and what might be the not just the most arousing and best remembered advertisement, but also the most positive message in changing and influencing brand preference, attitudes and preferences.

Hypothesis 4: There will be a significant interaction between valence (negative/positive) and arousal such that negative advertisements will have higher arousal than positive advertisements

The findings from this study did not support the hypothesis that there would be a significant interaction between valence and arousal such that negative advertisements would have higher arousal than positive advertisements.

This is contrary to prior research in advertising and communications that found that negative advertisements had higher levels of arousal than positive advertisements. Bradley, Angelini and Lee's (2007) study, using psychophysiological methods of eye startle response and EMG, found that negative advertisements had marginally higher rates of arousal than positive advertisements; although, the difference was such that it could not be relied upon across a population.

Prior studies in political marketing that examined negative advertising did not use psychophysiological methods to study arousal, they instead examined how negative advertising aroused voters as a call to action. According to Rossiter and Bellman (2007), this is a method that should be used by informational advertisements as it initially creates a negative emotion, presenting problem to be now solved by the consumer, followed by a solution to solve this problem which occurs in the second half of the message. In the case of a negative political advertisement, this would relate to the strategic objectives of the organisation behind the message. This could range from influencing turnout, increasing distrust of the attacked brand, or harming the source credibility of other political brands in the market place. Prior research has noted the success of each of these when negative advertising has been used; although most of this research is not recent enough to consider the advent of newer types of communications, such as social media.

The findings from this research extend the Bradley, Angelini and Lee (2007) study, which outlined a need to develop a revised theory of negative advertising effects in political marketing. This is, in part, because political messaging structure creates the negative emotion may not be successfully demonstrating a solution, which is required by previous theory. Alternatively, due to the high level of negative advertising by all parties involved in the political campaign, the "problem-solution" division espoused by the theory may not be as effectively communicated in practice. This is an area that requires further exploration and research.

As Lang (1991) stated, political advertising is a unique subset of IMC, but it is not typical of it. In a practical sense, what these results are revealing is that perhaps the reasons for why political advertising is unique relates to the dual concepts of exchange in political marketing that are communicated by political parties: that of value (positive) and that of loss (negative). Based on the finding of the thesis, the communication of a promise of loss did not arouse voters to the level predicted by theory. The negative advertising messages did not result in an emotional response by the voters. Without that emotional response, a negative advertisement will lack the interest of a voter, which means there will be no further desire to act upon the contents of the message.

This means that if positive political advertisements have the same arousal, or even higher levels of arousal, as negative advertisements, political parties need to consider stopping the use of negative advertisements because of the harm they could be doing to their brand. There is also the societal aspect of the harm on the perception and involvement with politics and democracy by citizens that is occurring in systems where this type of advertising is used in high rotation during election campaigns. One possible result of the overuse of negative advertising is the increasingly difficulty for these types of messages to arouse the interest and action of the viewer. Although the negative advertisements do have higher recall rates, this level of recall may also be interrupting the "problem-solution" framework (Lang 1991; Shapiro and Rieger 1992).

Finally, political advertising, and specific negative advertising is demonstrably becoming harder to achieve in any form of political advertising. Lang (1999) demonstrated that viewers only have limited capacity to process messages before all mental resources are allocated, and attention towards messages declines. Given the increasing amount of information that an average person is exposed to in a day from a wide range of marketing communication and non-marketing communication sources, this level might be reached sooner than previously predicted.

Hypothesis 5: There will be a significant interaction between pace (slow/medium/fast) and arousal such that slower political advertisements will have lower arousal levels than faster political advertisements

The findings from this research showed that there was no interaction between pace and arousal such that slower advertisements will have lower arousal levels than faster advertisements. This is contrary to the findings of earlier research in communications and advertising. As illustrated in Chapter 4, the results of the skin conductance and

heart rate did not indicate significant differences in arousal between the types of advertisements in the study. This is in contrast to prior commercial marketing studies by Bolls, Muehling and Yoon (2003), which found that the higher the number of cuts, the more arousal levels increased. These studies supported the prior findings of Lang et al. (1999) who also found a positive relationship between arousal and pace. Similarly, Lang et al. (2004) found that whilst faster-paced commercial advertisements did elicit more arousal than a slower-paced message, they also had the noteworthy finding in that how much viewers wanted to pay attention to a message, or how much they liked the message, influenced how much attentional resources were allocated to the message.

This finding by Lang et al. (2004) can be linked to the Elaboration Likelihood Model (ELM) of advertising that theorises that a message is allocated attention according to the interest or involvement the viewer has with a product, with higher involvement products being allocated more attention resources through the central route of processing and lower interest messages being processed by the periphery route of message processing (Petty and Cacioppo 1986).

Applied to this study, the findings would indicate that the effect of production pacing is negated by the low, if not negative, level of interest, most viewers have towards politics. If a message then uses fast pacing, this may make the message hard work for a viewer (Lang et al. 2004) and, therefore, less likely to be allocated attention resources.

As Lang et al. (2004) noted there is a difference between arousal and arousing content as how a viewer will respond to arousing content will depend upon the viewer's psychological profile. Content that arouses some may not arouse others, even with the structural influence of pacing. However, if a viewer does pay attention to a message then they may find themselves reaching cognitive message processing capacity sooner with a fast-paced message than with a slow-paced message and, therefore, be less likely to respond emotionally to the content in the message, even if they did find it to be emotionally arousing.

These findings also contradict the later findings of Yoon, Bolls and Lang (2006) on the effects of arousal and pace on the liking and believability of commercials. They found that pacing and content arousal improved attitude towards the brand in a message more than when those elements were used separately. A fast-paced arousing message increased positive attitudes towards the message claim and increased purchase intentions towards the brand. This study, like most others in this area, was on

commercial products and did not use any negative commercials or political advertisements, although it did use advertisements that could be seen as being arousing due to their content (Yoon, Bolls and Lang 2006, Lang et al. 2007). However, considering the attitude towards the political product and the political advertisement, this may help explain why there was not a significant interaction in this study between pace and arousal.

Hypothesis 6: There will be a significant interaction between pace (slow/medium/fast) and between valence (negative/positive) that will influence arousal such that slower positive political advertisement will have lower arousal than a faster negative political advertisement

The findings from this research do not support this hypothesis, which is consistent with earlier findings from this research but contrary to earlier findings from research in advertising and communications. Lang et al. (2004) found that there was a positive relationship between pace and arousal, with increased pace leading to increased arousal as more attention resources were allocated to process the faster messages. Consistent with Lang (1999), they found that once the capacity for message processing was reached arousal levels decreased as attention resources were allocated to other tasks. Bolls et al. (1997) found that the interaction between fast-paced and arousing advertisements produced better recall of messages, which supported the earlier findings by Lang, Newhagen and Reeves (1996) that found a relationship between content arousal and pace. Bolls, Muehling and Yoon (2003) found that as paced increased so too would involuntary attention (a measure of arousal) to positive messages. They did not test for negative messages and their messages were all positive commercial messages of varying product categories and involvement levels.

Lang et al.'s (2005) study on news stories and pacing found that there was a main effect of fast pacing on arousal, but this was more noticeable for a longer story (40 seconds to 185 seconds in length) than a shorter story (15 seconds to 83 seconds in length), but specific content was not examined.

A possible explanation why these results went against the prior findings is that none of these studies had examined political advertising, which affects the involvement and interest in the message (Lang et al. 2004) by a viewer which, in turn, influences the level of arousal towards the message. As noted by Lang et al. (2004), the effects of the structure and content of a message on creating emotional arousal are negated if the

attitude towards the message is negative or there is little interest in the message itself, even if it has elements in it that normally create arousal.

For political marketers and campaigners, this finding presents further support to the argument that negative advertising is no longer an effective method to use on voters and during campaigns. Even with the use of structural features and arousing content, voters are no longer finding these types of messages arousing enough to change their level of interest and involvement. This means that these types of messages are not acting as a call to action. However, it also indicates that slow-paced positive political advertisements are just as arousing as a fast-paced negative commercial. Given the attitude towards negative advertising by many in most political markets, this means that to improve the ability of political advertising to arouse voters and have them act on a message, advertisers should use positive messages.

One early study in television political advertising by Benoit (1999) supports the findings from this research. Benoit studied the content and use of political advertising in US Presidential campaigns from 1952-1996 and found that the winners of campaigns used more positive messages than negative ones. Findings from the recent 2013 Australian Federal election show that the winning Liberal Party used more positive messages than negative messages (ebiquity.com 2013).

The finding of this hypothesis also confirms the earlier finding that essentially prefer promises of value over promises of loss when it comes to political exchange. Political exchange, therefore, needs to focus on the creation of value between two actors, and not the creation of loss.

Hypothesis 7: Party preference, as measured by House of Representatives voting behaviour, will influence arousal to advertising such that when advertisements are shown from the political party preferred by the respondent there will be an increase in arousal

The findings from this research do not support this hypothesis. There has yet to be a research study using this methodology into the relationship between exposure to arousing and non-arousing political messages from the political party of preference by the viewer. However, a 1989 study by Hill on voter response to political advertising self-report measures found that attitude towards the advertisement was consistent with the content in the message. That is, voters reacted negatively to negative advertisements, but their responses also showed that negative messages hadn't had any

effect on the evaluations of the attacked brand or candidate. Hill (1989) found that there was a significant favourable response to positive messages from sponsoring brands or candidates that the voter preferred, but to no other message type and, if anything, there was more negativity towards negative messages from any sponsoring brand.

Other studies in political advertising examined the broader relationship between advertising and voting and consumer behaviour, but from a more narrow perspective and without examining the relationship between voter party preference and advertisement shown. For example, Faber, Tims and Schmitt (1993) considered the impact of negative political advertising on involvement and alternative information sources as an impact on voting intent, but did not consider how the preference held by survey respondents influenced their involvement levels or information seeking behaviour based on the source of information they were watching or reading.

Other studies in marketing and advertising on the relationship between consumer preferences and advertising have found that consumers with a preference for a product or brand will like a message more from that product or brand over other messages. Casswell and Zhang (1998) found that beer drinkers liked messages from beer advertisers, especially from the preferred brand, more than other types of products. Batra and Ray (1986), whilst not examining preference specifically, found that the affective response to a message was significant in influencing attitude towards the advertisement, attitude towards the brand and, eventually, purchase intention.

The finding from this hypothesis is important because if a message from a political brand is not able to arouse action within those that support it, either being positive or negative, then the message is not effectively communicating either a promise of value or even a promise of loss. There are several implications from this.

Firstly, the promise that is being communicated to the market is not of any perceived value to the market, either being one of gain or loss. This might be a reason why humour is seen to be the most effective negative message in political advertising as it increases positive attitudes towards the message and the brand.

Secondly, the creation of value between actors is being too influenced by third party stakeholders who dilute the value offering created between the principal actors (Hughes and Dann 2009). This means that secondary actors in the exchange process who influence the primary exchange process between the two primary actors are then creating a product that has little appeal to facilitate an exchange that creates arousal within consumers. This is perhaps also picked up on by the finding from the previous hypothesis that found little difference between positive and negative messages regardless of pace.

Thirdly, attitudes towards political brands and all forms of political advertising, not just negative messages, by voters are making it harder for advertisers to create arousal with their messages, even if those messages use structural features or content that might be seen as arousing. Related to this, is the fact that messages do not appear in isolation – they appear as part of a wider advertisement break where the messages preceding and after the political message are primarily positive messages, which are communicating primary exchanges of value between two primary actors. The fact that low involvement consumer brands do not use negative messages as part of their strategy to achieve their sales and communication objectives should have served as a warning a long time ago to political advertisers that, even if it is unique, still cannot make messages that are in stark contrast to what the voter is used to seeing.

The finding from this hypothesis indicates that party preference does not influence arousal to a message, even when that message is from the preferred brand and is a positive message. However, as nearly all political parties convey both promises of value and loss in a campaign, this strategy is likely to be affecting how party supporters perceive all messages as a negative attitude towards one is likely to then affect positive messages and therefore purchase intention. It can be argued from the findings of this hypothesis that political advertisers need to consider what there is to be gained from communicating a promise of loss when it effects attitudes towards their primary promises of exchange for value and, therefore, likely purchase intention towards their brands.

Table 5.3: Summary of Hypotheses and Research Findings

Hypothesis	Confirmed/Disconfirmed
Hypothesis 1: Negative political advertisements will be better recalled than positive political advertisements	Confirmed
Hypothesis 2: Political advertisements that are more arousing will have higher rates of recall	Disconfirmed

Hypothesis 3: There will be a significant interaction between valence (negative/positive) and pace (slow/fast) such that fast negative advertisements will have a better recall than slow advertisements	Disconfirmed
Hypothesis 4: There will be a significant interaction between valence (negative/positive) and arousal such that negative advertisements will have higher Galvanic Skin Response than positive advertisements	Disconfirmed
Hypothesis 5: There will be a significant interaction between pace (slow/medium/fast) and arousal such that slower advertisements will have lower Galvanic Skin Response than faster advertisements	Disconfirmed
Hypothesis 6: There will be a significant interaction between pace (slow/medium/fast) and between valence (negative/positive) that will influence arousal such that slower positive advertisements will have lower Galvanic Skin Response than faster negative advertisements	Disconfirmed
Hypothesis 7: Party alignment, as measured by House of Representatives voting behaviour, will influence GSR/EDA response to advertising	Disconfirmed

Key Findings

This thesis made some important findings in the knowledge and application of political advertising. Firstly, this thesis confirmed earlier findings that free or unaided recall of political message content is highest when negative advertising is used. However, this is not a sign of effectiveness of negative political advertising and even could be a sign of the exact opposite. Recall is likely to be high because of the negative attitude towards negative political advertising that has been found in more recent studies on this area. There is also likely to be a negative reaction to political brands by viewers which, added to the negative or low positive attitude towards the advertisement, means they are more likely to recall a negative message because of how much they dislike this message, more than any one feature in it.

Another finding of this thesis was that there was little arousal in response to watching negative advertising, and political advertising in general. This finding is important as it means that if practitioners are using negative advertising to communicate a promise of loss to influence purchase or voting action intent by a voter, then this strategy is unlikely to be as effective as thought. As arousal is essentially a type 1, or primary emotional response (Bellman 2007), there is also likely to be a type 2, or more cognitive emotional response to viewing the message. Therefore, this more cognitive response is likely to be negatively influencing the attitude to the advertisement and brand such that every time a viewer sees a political message, regardless of valence or other features of the message, they will primarily have a negative response to that message. This would also help explain why there is also a negative attitude towards political advertisements and brands across all levels of the political spectrum, not just a federal level.

This thesis also found that pace is not a sole factor in creating arousal upon viewers of political messages. This is an important finding as prior studies in communications examining arousal to different-paced commercial messages found that increasing pace increased arousal in viewers. However, there had been no study into political advertising that examined the relationship between arousal and pace, even though creating an emotional response, or arousal, to a message is important in achieving the ultimate aim of influencing purchase intent for any advertiser. Some prior studies in advertising had found that attitude towards the advertisement and brand could be strong enough to outweigh the effects of structural and content elements used in a message. This is likely to be the reason why here pace had no effect upon the arousal response to political messages.

Another finding of this thesis was that any promise of exchange in political marketing needs to focus on a positive exchange and not a negative exchange. Although there was no difference between arousal levels to negative and positive messages, regardless of pace, negative political advertisements are more likely to lead to negative attitudes towards political advertising and brands than positive messages. This is indicative that voters do not find messages communicating promises of loss interesting, involving or arousing. However positive messages, that are those promoting only promises of exchange of value, do not have the same negative attitudes primarily towards them. This is important as it is another reason why negative political advertising is not working in practice as well as many believe.

Finally, this research found that party preference does not influence arousal towards messages, which could be due to attitude towards the advertisement and brand. This is also an important finding in political advertising – if messages cannot arouse even the party faithful, then messages need to be redesigned in order to influence voters to take a further interest in the message and then influence their actions in the form of brand preference and purchase intentions. It also reinforces the likely negative attitude held by the majority of voters towards all forms of political advertising, particularly negative advertising. This is further support for political parties to focus on the communication of political exchanges that create value, rather than exchanges that only create loss.

Contribution to the Literature

This thesis contributes to the literature in political advertising by reinforcing the findings that negative advertising achieves the highest rates of unaided recall of any type of political advertising.

Nevertheless, it is now known that that higher recall does not equate to higher effectiveness in political advertising. This is because recall for negative political advertisements is likely to be negative about the message and the brand. It is not acting as a call to action or transformational message that seeks to make the viewer or voter undertake a deeper involvement with the message that then influences their behaviour through changing their brand preference or purchase intent. This is supported by the findings in this thesis that no form of negative or positive advertising, even when combined with the effect of faster pacing, was able to generate increased arousal from viewers.

The findings from this thesis also now add support to the theory that pre-existing negative attitudes to the political advertisement and the political brand make it ineffective to use negative advertising to create arousal as they will have little or no impact upon the voters. Even positive political advertisements are not creating arousal; however, they do not have the same level of pre-existing negative attitudes towards the advertisement and brand that negative advertising does. Therefore, this makes it more likely that a positive message will have some influence on consumer behaviour and purchase intentions as consumers prefer a promise of exchange that includes value as they may identify that they helped co-create that value (Vargo and Lusch 2012).

Connected to the above point is the other finding from this thesis that structural elements are not creating arousal in themselves in a political message. Although not all structural elements were considered in this study, the inability of pace to alter arousal was a finding that was unique to media studies in psychophysiology and political advertising and marketing. The implications from this are that structural elements cannot be relied upon to help alter arousal responses to political messages, not at least until further studies are carried out that examine the relationship between structural elements and political advertising.

Another significant finding from this thesis is that as there are more favourable attitudes towards positive messages than negative messages, voters prefer the promise of value over the promise of loss when it comes to the creation of exchanges between themselves and other political stakeholders. Whilst commercial marketers have known this for many decades, political marketers have focused on communicating two value exchanges to consumers: the promise of value and the promise of loss. The findings from this research supports the notion that only promises of value should be communicated as the market sees no value in one of loss, even as a method of altering behaviour of the voter to make them behave in a way favoured by the supporting party. Further research is needed on political exchange and political advertising to understand why voters are not responding emotionally to promises of value, such as the role of stakeholders as secondary actors in political exchange.

This research also found that political advertising also needs to develop new measures to calculate effectiveness of messages. As Lang (1991) noted political advertising is unique in many aspects to other forms of advertising. Understanding where this uniqueness begins and ends will not only help to extend knowledge of political advertising, but also advertising in general. Measuring pre-existing attitudes to different types of advertisements and brands will be important in understanding how to create a message that will arouse voters that will further develop their interest in the message and influence their behaviour as consumers.

Limitations

A limitation of this study was that this thesis only examined one aspect of structure and pacing, when other elements could have been influential upon arousal. Structural elements (Rossiter and Bellman 2005; Lang 1990, 1991, 2006) are made up of a large

number of different advertising features. Research in commercial marketing has been carried out on the influence of most of these on the emotional responses of viewers towards them. For example, the onset and type of music in a message has been studied by many and is seen as an important variable in influencing arousal on a viewer. More resources would have been required to study other elements of structure and these were not available for this research.

Another limitation was that this study did not consider the information density in the content of the messages being studied. This is a significant element in helping ascertain when a viewer may stop paying attention to a message and, therefore, when their arousal levels might be influenced. It may also help explain arousal towards a message of different structural types as a message with high levels of information density will have its effectiveness influenced by elements, such as fast pacing that may make the message too hard to follow and have an interest in, even if this message was positive. To ascertain the levels of information density would have required several coders and the time to check the findings, factors that were outside the scope of this research.

Another limitation of this study was that only a small number of political advertisements were used in relation to prior studies in political advertising and similar studies in communication theory. However, in order to keep the study as authentic as possible in relation to how a viewer would watch television during a political campaign, study advertisements were randomly inserted into a typical length message break during a one hour long television show. This also helped disguise the true intention of what the respondents were being asked to watch and, therefore, minimised the potential for psychophysiological responses to be influenced by prior study knowledge by the participants. Although other studies did use more commercials, the large majority also did so without inserting the experimental messages into a television program which is how a viewer would actually watch the message.

Message appeal was also not examined in this study. Message appeals have been shown to influence message arousal and attitudes towards the message. For example, humour appeals in a negative message may help negate the effect of the negative content of the message and actually increase the probability of this message being liked by some in the market, although if the message was repeated too regularly then there could be a danger of fatigue effect influencing the effectiveness of the humour appeal. However, to study appeals would have required a separate study as this would have required a new

experiment with a different type of psychophysiological measurement, likely to be eye gaze or startle reflex (a similar method was used by Bradley, Angelini and Lee [2007] in their study). This would have been outside the scope of this research, but might be an issue that future researchers may wish to study.

A practical limitation of the thesis is that whilst the contribution to the literature occurs through extension and testing of key theory, and a focused section of structural elements of political advertising, the complexity of practical political advertising requires further research. As far the thesis can contribute to practice, the development of insight into the specific parameters of valence and pacing contributes to understanding of the role of speed and content in political advertising. Additional studies are required to address factors such as the impact of information density on political advertising which was not able to be tested with the research methodology of this thesis.

This study was also limited in that it only used emotional arousal measurements of EDA and HR, which primarily only measure responses to type 1 or primary emotions. It is impractical to measure type 2 emotions during an experiment of this type as the study would need to be stopped in order to use a type 2 emotion measure, such as a self-report method like the Self-Assessment Manikin or the Geneva Emotion Wheel. Using a type 2 emotional response measurement method post-test is also not practicable as this would require respondents to either view the message again and then respond to it, ruling out any post-test recall studies, or extending the survey after other measurements had been taken, such as recall or attitudes towards the advertisement.

Future Research

This study has some important implications for future researchers. Firstly, further research is required into the relationship between information density in political advertising and recall and arousal. Defining information density in a political context would also be necessary as politics is a unique product category compared to existing commercial product categories.

As political information is unique in involvement and interest in relation to most other product categories, a baseline measurement of coding political images, words and information into categories of negative and positive valence and levels of information density needs to be developed so as to provide a way of measuring the information valence and density in a political message. Such a measurement tool would also allow practitioners the opportunity to rate their message before it aired and, therefore, allow them the opportunity to alter the message to a level where there would not be a negative emotional response to viewing the message and where the message was also effectively communicating the value being offered by the advertiser.

Secondly, further research is required into how pre-existing attitudes towards political advertising and brands influence recall/emotional responses (type 1 and type 2) towards political messages. Measuring pre-existing attitudes towards political advertising and brands, even with a sample outside that of an experiment, could help build a model of predictability of emotional response by voters towards different types of political advertising. Whilst this method would need to be updated regularly to account for changing consumer preferences and needs, it would still enable researchers to know how a market may react to different types and appeals of political advertising.

Related to this, research is required into how consumers perceive political advertising and its purpose, and what type of message appeal (humour, fear, logic, etc.) message content (positive, verbal, visual, use of leaders as endorsers) do they prefer and why. Understanding the expectations of consumers from political advertising will help design messages that consumers have a need to see, therefore, increasing the probability that they may develop further interest in the message and likelihood of their behaviour being influenced.

Further research may also want to examine the relationship between the limited capacity for message processing and different types of political advertising – information density, valence, structural elements. All voters have only a limited capacity for message processing. Once their limit is reached then arousal levels start to fall as attention processing priorities are switched from the primary function of message processing to secondary tasks (Lang 2000, 2006). One of the methods used to detect this is STRTs. When capacity is reached STRT's will improve as a viewer will have more resources to process secondary tasks as their attention would have moved away from primary message processing.

Therefore, a message that is information dense will require more processing by the viewer, but use the limited resources available for message processing. This may mean that the viewer will perhaps switch off the message the next time it is shown, making the message ineffective. If this is combined with a structural element that increases

arousal, thereby also taking up information processing resources, then this effect may occur even sooner. This may increase the likelihood of a viewer then developing a more negative attitude towards political advertisements and brands as they will feel a natural inclination to no longer pay much attention to messages that make them work harder at processing a message than one that does not do this. This issue is something that future research can help solve.

Research into other structural elements and message appeals influence on arousal is also required to understand the relationship that these elements have on emotional responses towards political messages. There are many different types of structural elements that make up a dynamic visual advertisement: cuts, edits, zooms, camera angles, sounds and music onset and type, use of colour (black and white, for example, to contrast with colour advertisements) and length all can influence the perception of the message and the content in it.

Then, there are the message appeals. Some of the types of appeals used in political advertising that need further investigation into their relationship with emotional responses are humour, fear and logic. Whilst some of these features have been investigated in commercial advertising, such as sound (Olsen 1994), music (MacKenzie, Lutz and Belch 1986), humour (Chattopadhyay and Basu 1990; Pelsmacker, Geuens and Anckaert 2002), and fear (Lang 1985), the findings are yet to be applied to political advertising using measures of emotional arousal.

Finally further, research is required into how the communication of exchanges by political advertising, specifically promises of value can be improved so that positive attitudes towards the advertisement and brand can be created. This may include the examination of issues, such as the influence and integration with other methods of communications, such as the Internet and social media. Consistency with surrounding messages in a message break may also be of interest, as inserting a message that is a promise of loss when all other messages are of a promise of value may be another reason why negative advertising is not as effective as many believe. Understanding the role that stakeholders have in value creation and, therefore, how a message is communicated is also important in understanding how political advertising works and how it can arouse interest in the viewers who watch it. For example, if a message is perceived by the voting or electorate market to be for a stakeholder then regardless of how the message is designed it may not arouse any interest and therefore be ineffective.

Conclusion

This current study set out to answer two important research questions. Firstly, what promise of exchange has higher recall from voters: the promise of value or the promise of loss? And secondly what combination of pacing and valence is the most effective to use in a political marketing campaign that can achieve recall and favourable emotional response from the market and, therefore, which type of message will positively influence their perception of the promise of exchange being offered to them by the brand of their preference?

The findings from this research support the answer that promises of loss communicated through negative advertising have higher recall from voters. However, whilst negative advertising has higher rates of recall because of likely negative attitudes towards this form of advertising and the brands that use them this form of communication is not effective as there was little arousal towards promises of loss and political advertising more broadly. The implications of these findings for researchers and practitioners are that whilst normally recall is a sign of effectiveness of advertising, in political advertising it needs to be used in the context of how emotionally arousing a message is to the market to measure true effectiveness.

The findings also show that whilst arousal towards all forms of political advertising is nearly equal, the higher rates of recall for negative advertising indicate a likely negative attitude towards this form of advertising and the brands that use it. This is also supported by the lack of higher levels of arousal towards preferred party messages by voters. This would indicate that if not even those that support a political party find their advertisements arousing then the preferred promise that should be communicated is one of value, and thus positive advertising, as this will lessen negative attitudes towards political advertising and political brands.

Another important finding of this research is on the use of structural elements in political advertising. Whilst this thesis only considered one such element, pace, prior research indicated that faster-paced messages should elicit higher levels of arousal of a message. However, this research found the opposite. This is likely to have been due to the fact that pre-existing attitudes towards political advertising, especially negative advertising, was either negative or very low levels of positive, that this negated the effect of pace on arousal. Even where pace was examined as part of the content or

valence of the message, again there was little increased levels of arousal towards the message itself, furthering supporting the finding that emotional responses to political advertising can be affected by pre-existing attitudes towards the advertisement and brand. This is also a significant finding for researchers in psychophysiological media processing as it establishes a condition under which a structural feature is not as effective as previously thought.

The limitations of this research were that only one aspect of structure was examined, pace, when other elements could have been influential on the findings. Information density and pre-existing attitudes towards political advertising and political brands were also not measured before the study. A small number of political advertisements were used as this made it possible to replicate as close as possible the actual conditions under which a voter might view these advertisements in the real world, rather than a laboratory setting. Only two measures of emotional response were used, heart rate and Electro Dermal Activity (EDA) which only measured primary emotional response to the messages in real time, whereas type 2 or cognitive emotions can have just as an important influence in how arousing respondents find messages.

Reading the findings from this research, it may seem implicit that political advertising does not have a bright future ahead of it. But this is only the case if practitioners continue using negative advertising as a key part of a political campaign as this is inconsistent with what consumers want from political brands. Most political campaigns that are long remembered by those in society are inevitably those that promised value and not loss: Obama's *Hope* campaign of 2008, Tony Blair's *New Labour* of 1993 and, in Australia, the now famous *Kevin07* campaign of Labor leader Kevin Rudd in 2007 all support how much consumers embrace positive campaigns that use primarily positive messaging.

Political advertising's future is not bleak. It should be for negative advertising; however, as the attitudes that are now ingrained in many voters towards this form of messaging are not just harming political brands, but also the democratic one. But there is hope for political advertising in the form of research, such as this, will add support to use more positive messaging to communicate only promises of value that consumers will see as political brands giving hope to the creation of better societies through policies that they wanted and help create with political parties.

Whether this happens, of course will depend upon the political systems in which political advertising is used, and the role of stakeholders in that system that is seeing a more triadic model of exchange emerging in political marketing, a point noted by Ormrod and O'Shaughnessy (2013).

Even though new media is emerging, such as social media, as a form of political communication, television is still the most effective way of raising awareness of the value offering of political brands. It is also the most significant expense in any political campaign of most political parties. As such, televised political advertising will continue to arouse interest of practitioners, researchers and those in society for many more years to come and, therefore, understanding how this form of political communication is apacts upon political marketing as a whole will also be of interest to all political stakeholders for the short, rassium and long term.

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APPENDICES

Appendix A Interactive Television Research Institute Study Appointment Script for Participants

Appointment Phone Call Script

Emotions in Television Advertising

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"Good Morning/afternoon, my name is _____ and I am calling from The TV Panel here at Murdoch University. Is that/May I please speak to NAME."

Invite, Suggest Appointment Time and Negotiate

"We would like to make an appointment with you to be part of the next study we are running. For this session you will need to come into The TV Panel's lab here at Murdoch University for about an hour and a half, for which we will give you \$25 Coles Group Gift Card for your time and travel."

"In this study, we are looking for people to help us out with some extra measures."

"One measure is a skin conductance reading which will involve having 2 electrodes taped to 2 of your fingers to measure tiny changes in sweating. A pulse monitor will also be placed on a third finger and another clipped to one of your ear lobes to measure heart rate."

"These measures do not hurt at all and are just like having stickers placed on your skin. We prefer to collect these data from healthy participants, so when you come along to our session we will ask you some brief questions about your current health. We are not collecting any medical information from you, but given this or any other reason, are you happy to participate in this study which may include physical measures?"

"We are making appointments for this coming DAY to DAY. When is a good time for you?"

[Always try to schedule appointments in blocks so there are not too many down times.]

Directions

"Are you familiar with The Media Lab's location?"

If not describe how to get to the Lab, parking and security information if attending night sessions or weekend sessions.

Thank and Sign Off

Appendix B Interactive Television Research Institute Study Information Sheet for Participants



Information Sheet for this TV Panel Study

Dear Media Panel Member:

Researchers at The TV Panel at the ITRI are testing how you respond emotionally to watching different types of television programs. This study is being conducted in association with researchers from The Australian National University and Murdoch University, who are trying to get a better understanding of the changing media landscape.

You can help us by consenting to participate in this study where we are testing how enjoyable it is to watch different types of TV programs. You have been randomly allocated to view the one-hour TV program, Australia's Funniest Home Video Show. The time to complete the whole viewing session will be about 60-75 minutes; however, it is expected that no longer than an hour and a half will be necessary for the session and the survey.

You can withdraw your consent at any time without having to offer an explanation or forfeit your compensation, and without any negative consequences. All information provided is confidential and no names, or other information which might identify you, will be used for commercial purposes, or appear in any publication arising from the research.

If you agree, we would like to video your viewing session so that we can use that information for further research analysis looking at factors such as device use, viewing positions and body language clues (e.g., non-verbal cues, facial expression). You can also check the appropriate box on the next page if you agree that your video can be considered for a "highlights" reel, showing examples of the participation process, which will be included in a video presentation about this study for our sponsors.

We would also like to collect from you two non-intrusive physiological measures of excitement and enjoyment. The first, skin conductance or galvanic skin response (GSR),

measures changes in sweating using two small electrodes on two fingers. The second, heart rate, is measured with one monitor being placed on a third finger to measure pulse (heart rate).

We prefer to collect these data from healthy participants who are not on any long-term medication, and although we are not collecting medical information from you, we do request that you complete the Physiological Screen Form attached before consenting to these procedures.

To compensate you for your time and travel costs you will receive \$25 Coles Group Gift Card for participating in this study.

If you are willing to participate, please complete the Consent Form on the other side of this page. If you have any questions about this research, please contact Dr Steven Bellman at Murdoch University on 08 9360 7350 or the lead ANU researcher for this study, Andrew Hughes (andrew.hughes@anu.edu.au).

Thank you for your assistance with this research project.

This study has been approved by the Murdoch University Human Research Ethics Committee (Approval 2012/XXX). If you have any reservation or complaint about the ethical conduct of this research, and wish to talk with an independent person, you may contact Murdoch University's Research Ethics Office (Tel. +61 8 9360 6677) or e-mail ethics@murdoch.edu.au). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.



Appendix C Interactive Television Research Institute Study Consent Forms for Participants

Consent to Participate in this Media Panel Study

I (the participant) have read the information on the Information Sheet. Any questions I had have been answered to my satisfaction. I agree to take part in this activity. However, I know that I may change my mind and stop at any time. I understand that all information provided is treated as confidential and will not be released by the investigators unless required to do so by law. I agree that research data gathered for this study may be published provided my name, or other information that might identify me, is not used.
I understand that much of the content that I will see in this study is pre-recorded and not controlled by The TV Panel. I agree to hold in confidence any information related to this study, and to not divulge this information.
I agree that my participation may be video and audio taped for research purposes. As described on the information sheet, this may include analysis of device use, viewing positions and body language clues.
I agree to have two small electrodes placed on two of my fingers to measure changes in sweating, and a pulse monitor placed on a third finger to measure pulse (heart rate).
I have completed the 'Physiological Screen' form and agree that the information given is correct at this point in time. (Only required if you are agreeing to the previous clause)

Name:	Member Number:
Address:	
City/Suburb:	Post Code:
Phone (home):	(other):
☐ I have changed my email address, see	e new address below.
☐ I would like to participate in the Onli	ne Surveys, my email address is below
☐ I am already participating in the Onlin	ne Surveys and wish to continue.
☐ I would like to be taken off the Onlin	e Survey mailing list.
Email address:	
Signature:	Date:

For internal use only:

Researcher Name:	ID	Provided:
	Party	Time
Signature:	Date:	Time:



Physiological Screen Form

(Day of participation)

Completing the following information will help us determine if it is okay to measure your body's response to the television content today. There are no right or wrong answers but it is important that you be truthful. We understand that you may have answered some of these questions when you signed up to participate in the Panel, but to ensure your greatest comfort and the most accurate data, we need to ask these questions again today.

This form does not ask for your name and will be kept securely in a location separate from your signed consent form. All information on this form is confidential. This information cannot be released without your consent unless specifically requested by a court of law. If you can't participate in the physiological measures, or choose not to, you can still take part in this study.

If you have any questions, please ask the research assistant.

Date: ______ Time:_____

Member ID: ______

Handedness: Left / Right / Both

Do you suffer from any medical conditions?	Yes/No	If Yes, please provide details	
Are you taking any long- term medication?	Yes/No	If Yes, please provide details	
Do you feel well today?	Yes/No	If No, please provide details	
Have you had caffeine, or a similar stimulant, in the last 3 hours?	Yes/ No	If Yes, please provide details	
Have you had any medication, alcohol, or used recreational drugs in the last 24 hours?	Yes/ No	If Yes, please provide details	

Internal use:		
RA initials:	Signature:	
Date:		

Appendix D

Interactive Television Research Institute Study

Post-test Survey "Alley" Images



Figure Appendix D 1: Survey "Alley" - Post-Test Survey Computer Location

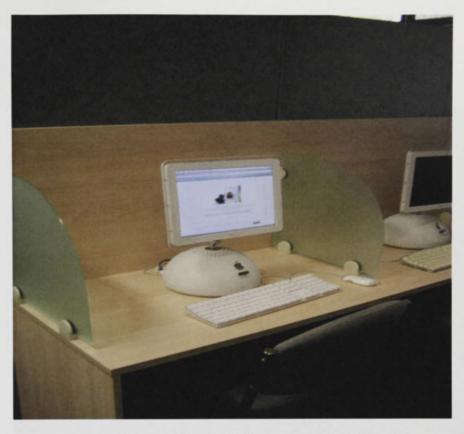


Figure Appendix D 2: Survey Alley – Apple Computer used for Post-Test Study

Interactive Television Research Institute Study

Green Room Images

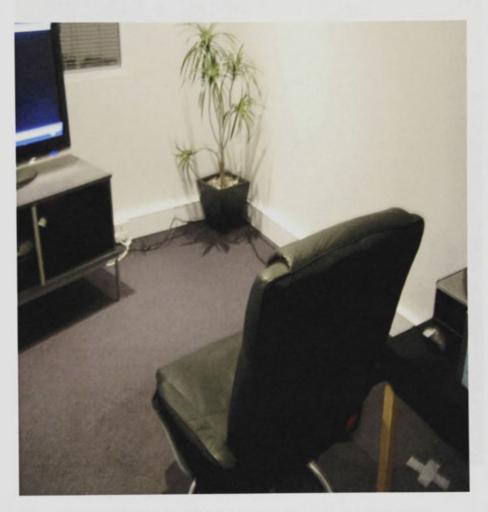


Figure Appendix D 3: Green Room used for ITRI study – note Biopac MP150 that was used to collect biometric data at rear of room, but out of sight of participants

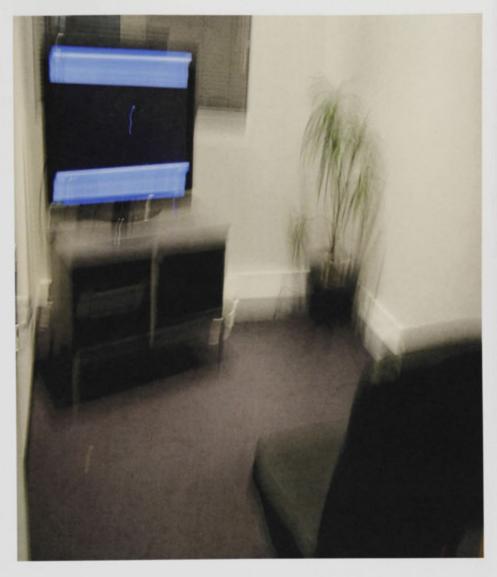


Figure Appendix D 4: Green Room used in the Study



Figure Appendix D 5: Biopac MP150 similar to that used in the study

Appendix E

Interactive Television Research Institute Study

Unaided/Free Recall - Questions

The program you saw today included some ads. The following questions are needed to see if your interest in these ads affected how you rated the program.

First, did any ads stand out?

Please write down all that you can remember about those ads.

Please only take a few minutes to do this

Adapted from Lang et.al. (1999), Bolls Muehling and Yoon (2003)

Appendix F

Interactive Television Research Institute Study

Aided/Cued Recall - Questions

Please look at each image and if you remember seeing the ad, please write down as much as you can remember

(Image inserted)

(Image sizes were all set at 12cm wide x 8.5cm long)

Adapted from Lang et.al. (1999), Bolls Muehling and Yoon (2003)

Appendix G Pilot Study

Advertisement Measurement Using GEW, SAM Scales and Self-Report Scales of Speed and Content

Conducted at the Australian National University

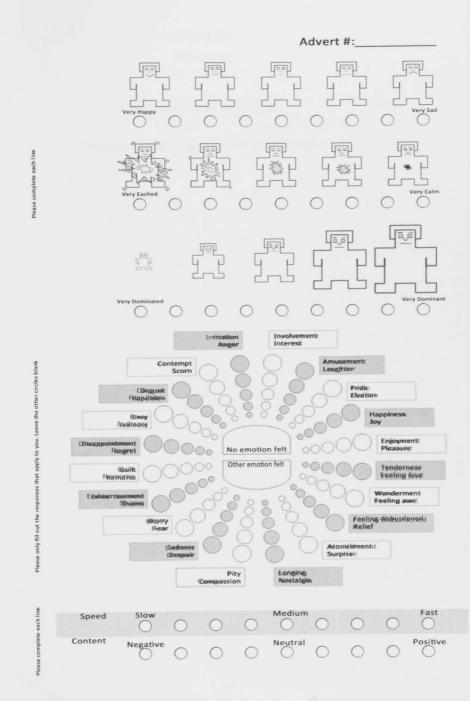


Figure Appendix G 1: Pilot Test Study Form

Appendix H Pilot Study

Consent and Information Forms

Conducted at the Australian National University

Participant Information Sheet

Emotions in Television Advertising

My name is Andrew Hughes. I currently work at ANU as a lecturer in marketing with the Research School of Management with the College of Business and Economics. I am also completing my PhD here at ANU. As part of my research for my PhD I am studying how consumers respond emotionally to political television advertising.

General Outline of the Project:

There is still much to learn about how television advertising affects us emotionally. Yet many in society are now beginning to question what impact television advertising is having on us in an emotional context. This is especially so where television advertising is used as the main marketing technique to influence consumer behaviour, such as politics. My research aims to investigate this impact and examines the role of political television message content and structure on a consumer's emotions.

I have chosen you because you are all exposed to advertising messages and are likely to be aware of political advertising. As students of marketing you have also studied television advertising and are aware of why it is used by organisations in both a commercial and non-commercial sense. Therefore being a participant of this research may help your understanding of this area further, and of marketing research in general.

Participation in the research is purely voluntary, and there will be no adverse consequences if you decide not to participate.

The advertisements will be shown in classes for this course in week 8 of the semester.

If you do participate then you will watch 18 30 second political television commercials, and then complete a short survey at the end of each. You should fill out the survey as quickly as possible at the end of the commercial as I need to capture your emotional reactions on viewing the advertisement as soon as possible after viewing the commercial.

I will analyse the data using a statistical package, either SPSS or R. Results will then be used in an aggregate form only in all future research publications of mine, including my PhD and other publications such as journal articles or conference papers.

You may withdraw from participation in the project at any time, and you do not need to provide any reason to me. If you decide to withdraw from the project I will not use any of the information you have provided.

Participant Involvement:

You need only attend the first 20 minutes of classes in week 8 if you wish to participate. If you do participate then you will watch 18 30 second political television commercials, and then complete a short survey at the end of each. You should fill out the survey as quickly as possible at the end of the commercial as I need to capture your emotional reactions on viewing the advertisement as soon as possible after viewing the commercial.

Results from the survey will only be used in aggregate form.

Potential Risks

I do not anticipate any risks to participants in this project. All of the advertisements I have chosen have already been shown on prime time Australian television and therefore have passed through numerous industry and

government regulators before and during their telecast.

If it any time you feel no longer comfortable with completing the survey you may

withdraw from participation in the project, and you do not need to provide any

reason to me. If you decide to withdraw from the project I will not use any of the

information you have provided.

If you have any questions or concerns about the study feel free to contact me via the

contact details below.

Confidentiality:

Your survey responses will be kept in a locked and secure location at all times and

only I will have access and will process and analyse the survey data. Any data stored

and analysed via a statistical program will be analysed and stored on a password

protected PC that only I will have access to. All data is kept for 5 years from

publication and then will be securely destroyed.

Oueries and Concerns:

If you have any questions or complaints about the study feel

free to contact me at:

Andrew Hughes

Lecturer

Research School of Management College of Business & Economics Australian

National University ACT 0200 Australia

Telephone: +61 2 612 54872 Fax: +61 2 612 58796

Email: andrew.hughes@anu.edu.au

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The ethical aspects of this research have been approved by the ANU Human Research Ethics Committee.

If you have any concerns or complaints about how this research has been conducted, please contact: Ethics Manager

The ANU Human Research Ethics Committee The Australian National University Telephone: 6125 3427

Email: Human.Ethics.Officer@anu.edu.au

Information

This research is investigating your emotional response to advertising. Your response is voluntary and therefore at any time you can stop the survey. Only aggregate information will be used in the results. The research should take 15-20 minutes to complete.

Return of the survey will imply your consent to use your responses on this survey in the research findings.

If you wish to view or to be informed the research findings and any subsequent publications please contact:

Andrew Hughes, Ph: 02 6125 4872 or Email: andrew.hughes@anu.edu.au

If you have any concerns about this research please contact Andrew Hughes or the ANU Human Research Ethics Committee at human.ethics.officer@anu.edu.au or 02-6125 3427.

Thank you for taking the time to complete this survey.

Appendix I - Brief history of Political Marketing

Period 1: 1937 to 1985: Based on the American Marketing Association (1937) definition

The AMA (1937) defined marketing as 'those business activities involved in the flow of goods and services from production to consumption', and later subtly refined by AMA Committee on Definitions (1960) as 'the performance of business activities that direct the flow of goods and services from producers to consumers' (Gundlach, 2007). The development of political marketing consciousness in the political science and marketing literature from Kelley (1956), Kotler and Levy (1969), Shama (1973, 1974), and O'Leary and Iredale (1976) was against a backdrop of marketing as a directional mechanism.

Consequently, Kotler and Levy's (1969) suggestion that political candidates could be marketed as a well as soap, and in a manner not dissimilar to the sales practices of the soap marketers, focused on the movement of party ideology to the voter. The 'directing the flow' approach is reflected in Reid's (1988) observation of political marketing developing as the effective means for communicating its benefits to the market, or, in effect, directing the flow of policy and promise from the party to the voter. However, it should be noted that in the post-World War II commercial marketing sphere, rapid developments in marketing theory such as the McCarthy (1960) marketing mix, Bagozzi (1975) exchange theory, and the prolific work of Kotler in expanding the non-commercial domain (Kotler and Levy 1969; Kotler and Zaltman 1971) were adapted and adopted by the developing political marketing movement.

For example, O'Leary and Iredale (1976) discuss the application of the marketing mix for political purposes, and Sharma (1975) applied the exchange concept to marketing, which means that exchange as a concept underpins political marketing (Henneberg and Ormrod 2013). The changes in marketing practice away from flow direction and towards exchanges led to the revision of the AMA definition of marketing in 1985. This influenced marketing research in the area of exchange, and by association political marketing. Henneberg's (2002) 3 market theory of government, electoral and political activism meant that the nature of exchange in political marketing also differed per actor and the market they operated in.

The work of Vargo and Lusch (2004) on exchange being not about taking ownership but possession or the right to consume and experience a product that the consumer has helped co-create, further supports the exchange that takes place between a consumer in the political market, be they a voter, organisation or broader society, and a political organisation or candidate. This may mean that contrary to Henneberg's (2002) theory that a consumer can co-create value directly with different political organisations, candidates and institutions, perhaps being an actor in several different markets simultaneously.

Period 2: 1985 to 2004: : Based on the American Marketing Association (1985) Definition

The AMA (1985) definition of marketing as

"the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objective"

This era of marketing represented a world view of marketing dominated by the Bagozzi (1975) exchange paradigm, McCarthy's (1960) marketing mix, and a managerial approach of marketing as a planned procedure. As marketing became more recognised as a business function in this era, its processes, models and methods that allowed a certain degree of predictability became favoured by many in management as marketing could be controlled.

Adaptation of the AMA (1985) definition in the political marketing literature of this period was focused around the application of exchange theory; conceptual development of the political marketing product, and debate over the extent to which managerial marketing could integrate with the ideology focus of the political party.

Political marketing theory had been an early adopter of the Bagozzi exchange paradigm with O'Leary and Iredale's (1976) exploration of its application to a bi-directional benefit flow of benefits for votes and votes for electoral outcomes. This was followed with an extended exploration of the nature of the political marketing exchange where promises of future policy or government activity are traded for voting behaviour (Lock and Harris 1996; O'Cass 1996a, 1996b; Kotler and Kotler 1999; Newman 1999; O'Shaughnessy 2001; Henneberg 2004).

Supplementing the exploration of the exchange were the efforts to apply the AMA (1985) conceptual parameters of product as 'ideas goods and services'. Whilst Clemente (1992) integrated elements of the AMA (1985) in viewing political marketing as involving ideas and opinions which relate to public or political issues, they also drew on the growing social marketing literature to add a behavioural orientation by specifying the purpose of political marketing as influencing people's votes in elections.

The post-1985 definition saw services marketing develop into a distinct subdiscipline of marketing thought, evolving from its origins in the 1935 definition to developing its own frameworks which were variously adapted and applied into political marketing. Harrop (1990) outlined a view of political marketing as a form of services marketing in which the political marketer was no different from any other services marketer who was promising intangible benefits from a future service. Harrop (1990) viewed the central value offering from the political party as consisting of the projected belief that it had the capacity to govern for the benefit of the voter and the broader society which was effectively a mix of ideas and services. This position is supported by Bauer's et al. (1996) view of the political party as a service provider to both voter and party member, Butler and Collins' (2001) view of constituency service as a "repayment" for voter support, and Marland (2003) regarding the 'service for hire' symbolism of the political marketing campaign promises.

The managerial aspect of the AMA (1985) definition was addressed by O'Cass (1996a, 1996b) emphasising the importance of design, implementation, and control as keys to the political marketing process, and supported by Lock and Harris's (1996) understanding of the activities of the political marketer as being a strategic approach of utilising marketing techniques of positioning, communication, research and market orientation.

Other authors such as Niffenegger (1989), Egan (1999) Baines et al. (2003), Jackson (2003) Chen and Chen (2003) and Rommele (2003) supported the application of the marketing mix in political marketing theory and practice. Newman (1999) approached political marketing as a holistic approach of applying marketing principles and procedures to political campaigning, with O'Shaughnessy (2001) and Lees-Marshment (2001) emphasising the managerial aspects of the adaption of business concepts, strategy, tactics, structures, labels and techniques to explain the process of exchange between voter and political party.

Finally, the political marketing discipline's application of developing commercial marketing thought puts it ahead of the curve with the rise of the Nordic School of relationship marketing being introduced relatively quickly into the Australian and European political marketing literature.

Grönroos (1990) defined political marketing as a form of relationship marketing whereby the political party was as seeking to establish, maintain and enhance long-term voter relationships at a profit for society and political parties so that the objectives of the individual political actors and organisations involved are met. O'Cass (1996a) also integrated Grönroos's (1994) relationship marketing concepts into political marketing purpose as the mechanism to create, build and maintain beneficial exchange relationships between the political marketer and political marketplace. Dean and Croft (2001) and Lees-Marshment (2001a) also introduced relationship management alongside Needham's (2005) mapping of relationship marketing onto Newman's (1999) permanent campaign process.

Period 3: 2004 to 2007: : Based on the American Marketing Association (2004) Definition

In 2004, the AMA released a relatively short lived and controversial version of the commercial marketing definition which recast the discipline as:

... an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders.

The decision by the AMA to release a new version of marketing in 2004 resulted in the need to re-examine how political marketing integrated the new understanding of commercial marketing into the political marketing sphere. Had the changes between 1985 and 2004 remained, it would have had several significant impacts on the way marketing was to be considered, both commercially and politically (Hughes and Dann 2006b)

In 2006, the AMA elected to undertake an uncharacteristically rapid review of the definition based on the reaction of their membership to the definition change in 2004. Consequently, although revolutionary in nature with the degree and level of change the definition brought, it was a short term influence on the marketing, and its time appears to have had limited impact on theory – down to the first significant debate and discussion of the role of the new definition being published in the November 2007 issue

of Journal of Public Policy and Management – the same month that the 2004 definition was official retired (Gundlach 2007). Although significant at the time, the AMA (2004) definition did not have a lasting impact, and will not be examined in depth in this literature review.

Period 4: 2007 Onwards: Based on the American Marketing Association (2007) Definition

The contemporary definition of commercial marketing was released by the AMA in 2007, and it defined marketing as:

the activity, set of institutions and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.

There are four major changes which influence impact on the adaptation and adoption of the revised marketing concept for application in political marketing theory and practice.

First, there is a renewed focus on marketing being activities, institutions and processes that reflect its integrated role in the organisation, and which retains the connection with the O'Cass (1996a, 1996b), Lock and Harris (1996), O'Shaughnessy (2001) and Lees-Marshment (2001) prior political adaptations which all included a reference to the functionality, concepts or processes of marketing.

Second, the principle of exchange remains at the core of the definition, and acts as a companion process to the creation, communication and delivery of value. This creates a wider range of opportunities for political exchange, and to some extent, the political marketing mixes. Exchange based political marketing had been acknowledged or noted across a range of authors such Niffenegger (1989), Lock and Harris (1996), O'Cass (1996a), Kotler and Kotler (1999), Newman (1999), Egan (1999), O'Shaughnessy (2001), Baines et al. (2003), Jackson (2003), Chen and Chen (2003), Rommele (2003) and Henneberg (2004) prior to the two definition changes, and their contributions are confirmed in the current AMA 2007 marketing definition.

Third, the outcomes of the marketing process are seen as 'offerings of value' rather than value itself in order to reflect customer co-creation of value. This represents a new approach to the political product which will draw on the 'politics as service' concepts of Harrop (1990) Bauer et al. (1996) and Marland (2003). It is this aspect of commercial

marketing that presents political marketing with the most significant opportunity, and this is detailed below in the new definition.

In short, the emphasis of marketing is away from an exchange of fixed value (goods orientated) and towards acceptance of greater levels of uncertainty in the exchange which can be reflected both in service dominant logic (Vargo and Lusch 2004), and in political marketing's necessary constraint of only being able to make contingent promise that require electoral success to implement (Hughes and Dann 2006a) The offerings that have value are much closer aligned with the established discussion of political products which as promises of policy, promises by political candidates and implicit promises of a party's ability to govern. (Harrop 1990; Newman 1999; Kotler and Kotler 1999; O'Shaughnessy 2001; and Lees-Marshment 2001).

Finally, overt recognition of organisational benefit as a key outcome of marketing has been removed as the targets of marketing activities are clustered into four groups of stakeholders 'customers, clients, partners and society at large' rather than the previous division of 'customer, organisation and stakeholder' which can increase the support for the voter-consumer frameworks raised by Clinton (2002), O'Cass and Julian (2002), Jackson (2003), and Dean (2005).

Appendix J – Background and Brief History of Psychophysiological Research in Media

Brief History of Psychophysiological Research (Potter and Bolls 2012)

Potter and Bolls (2012), in their in-depth overview of the area in their book Psychophysiological Measurement and Meaning: Cognitive and Emotional Processing of Media, define separate periods in psychophysiological research: The behaviourist era and the information processing era. Each period can be seen to correlate to the progression of media types from newspapers and radio through to interactive media such as the internet and social networks.

The content which follows is a very brief summary of their work on the early history of psychophysiological research taken from their book. For a more detailed history and description of this information please read *Psychophysiological Measurement and Meaning: Cognitive and Emotional Processing of Media.* Cacioppo, Tassinary and Berntson (2007) provide an excellent overview of the medical literature in relation to psychophysiological measurements and methods in their book *Handbook of Psychophysiology*.

Behaviourist Era

Earlier researchers before this period had understood there was a link between stimuli and the behaviour that then followed it. As methods for measuring were only very basic, early research had a more observational focus, similar in methodology to early advertising research such as Nixon (1924). This led some researchers to wrongly believe certain variables, such as format type such as humour or laughter, were the sole cause of the effect, when this may not have necessarily been the case. The main focus of the early studies was on the most influential media at the time – film.

Dysinger and Ruckmick's (1933) study "Movies and Youth" was the first to use physiological measures to analyse response to stimuli. This study used heart rate and skin conductance to measure how people were affected by watching different film content. Part of the study was done under controlled environmental conditions in a lab, and part of the study was conducted in the last three rows of a movie theatre as people watched the films, thereby replicating as closely as possible the environmental stimuli in which participants would normally respond to media. Their findings were that how the individual reacted to the film was dependent upon who they were as people, and less

on the film content itself. This was a unique finding at the time for most had assumed the content produced a universal response in people. Dysinger and Ruckmick's (1933) study laid the theoretical foundation for later work by supporting the proposition that internal and external environmental factors influence how an individual responds to media, not the media itself.

However the direction of psychophysiology after this study was heavily influenced by the stimulus-response behaviourist and classical conditioning theories of researchers such as Pavlov (1927) and Skinner (1950). In summation, this research focused on examining how people responded to external cues. This was because as the internal workings of the brain could not be seen they could not be measured and therefore there was no point in researching this aspect of behaviour (Potter and Bolls 2012). It was the behaviourist influence on communication researchers at that time that influenced the development of the Shannon-Weaver (1949) model of communication, also known today as the SEMCR model of advertising effects.

The behaviourist era included noticeable research such as that done into the *War of the Worlds* broadcast on October 30, 1938 that examined how people had responded to the panic caused by the broadcast of this show. Carl Hovland was another behaviourist influenced researcher in communications who undertook lengthy research into opinion change using messages. Hovland (Hovland, Janis and Kelley 1953; Hovland and Weiss 1951; Sherif and Hovland 1961) examined both film and audio messages influence on people's attitudes and opinions across a range of formats and types. Hovland's research laid the foundation stones for much of the work that is conducted into achieving opinion change using communication methods, the relationship between source credibility and message effectiveness and the relationship between social judgement and a person's reaction to communication stimulus.

Bandura (1977, 1986, 1994) was another behaviourist theorist whose contribution was in how people's behaviour was influenced by observing that of others. In particular he examined how the attractiveness of one person affected the behaviour of another. He also did research into how aggressive behaviour was learnt, conducting a lot of this research by observing how children learnt behaviour. Bandura's work later evolved into social cognition theory. Most of this behaviourist research into communications was conducted up until about the early 1950's when a more information processing era started to evolve.

Information Processing Era

This era was the start of a more scientific approach to research in this area (Potter and Bolls 2012). Science was about prediction, explanation and understanding, but also about why something happened the way it did, and understanding what specific sequence of events lead up to a certain effect occurring. Science also examined multiple variables, more than the two variables approach used in behaviourist research, which meant ignoring how the mind worked was no longer a suitable option for investigating behaviour influenced by media. Lachmann, Lachmann and Butterfield (1979) in their book *Cognitive Psychology and Information Processing: An Introduction* how different scientific fields were combined by researchers to help provide a scientific explanation of research in the area. The authors also go into a description of how each science was used to enable the advancement of research in the area. The authors provide a list of assumptive principles to be used by those seeking to investigate how the mind interacts with media:

- Humans have innate capacities
- · Humans are information seekers
- · Knowledge is stored in the brain
- · The brain is a knowledge manipulator
- Human beings are systems
- Systems are divisible and take time to complete
- · Science should work on issues that are applicable to everyday life

These principles still influence research in the area. They were the influence for the principles of psychophysiology that Cacioppo, Tassinary and Berntson (2007) listed in their *Handbook of psychophysiology* which are used by many in the field as their basis for research. These are outlined as follows, and explained in depth below:

- · The brain is embodied
- · The work of the brain and the body happens over time
- · The subtractive method applies to analysing physiological systems

- The body's primary job is to keep itself alive
- · Cognitive processes can be inferred from bodily reactions

This is based around Rene Descartes theory that the brain receives inputs from the other senses to create cognition, the view of the world (Thelen, Schoner, Scheier and Smith 2001: 1 in Potter and Bolls 2012:24). Indirectly, Wroe Alderson's famous quote that an ideal is the perfect world a person wants to live in and an ideology is how that world should be is a good example of this in practice.

Whilst it may seem natural that bodily and cognitive processes work over time, this concept is important in studying psychophysiology. Memory is measured in seconds, minutes, hours and days, even years, to give an understanding of how media may affect us but in that time multiple variables are influencing that process through aging. For example, how a person reacts to media will be different when they are 20, 30, 40 and so on. This is because of the natural aging process and researchers need to take this into consideration when conducting research in this field.

This is read in context with the importance of time but essentially means using time as part of the measurement process of reaction to media. This is important in dynamic media, such as film, radio, television or the internet, where the message is changing every few seconds or even quicker. The subtractive event was first posited by Franciscus Donders (1969), who theorised that an event that took longer the further away it was from the brain, and the more cognitive processes or events were involved with that event. He could measure this by timing each process separately, and then measure how long it took to complete multiple tasks. He would then subtract the difference between the multiple tasks and the single tasks to arrive at a measure (Potter and Bolls 2012: 25)

To apply this to a psychophysiological setting, this means that when testing different types of media, for example positive versus negative political ads, that if there is more of a response to one over another then using past studies on similar types of media, such as negative content like horror movies or how someone might respond to watching a non-political positive commercial, allows for a subtraction to be made. This analysis should then allow for knowledge to be gleaned about the state of the mind (Potter and Bolls 2012: 26).

The human body is remarkable in that it has so many measures in-built to maximise survival. This though can make the task of separating the processing of media messages difficult. As the first principle stated the brain is part of the entire operating system of the body that is designed to sustain life. The brain, as the CPU of this system, controls all responses to environmental stimuli to ensure that the body is kept safe at all times and is in a state as close to equilibrium as possible, or as it is known medically homeostasis (Cannon 1929 in Potter and Bolls: 27).

Cannon felt that homeostasis was achieved by opposing activation of the sympathetic and parasympathetic nervous systems. There are several nervous systems within the body, but of these only a few are of interest to researchers. The central nervous system, which supply's information to the brain and for the spinal cord, and the peripheral nervous system, which supplies the brain with information from the periphery of the body, are of interest to media researchers because of their respective functions.

Nerve cells, of which there are over 100 billion in the body at any one time, contribute to either the sensory system or the motor system. For media researchers the relevancy of this is that responses to stimuli are passed through the nervous system. Sensory system nerves respond to the senses being stimulated and motor system originate in the spinal cord and travel outward to skeletal muscles, organs or glands. This allows for a researcher to measure responses made by the body according to whether or not this response is made by the sensory or motor neurons.

The Autonomic Nervous System (ANS) is also of interest to researchers, as this system controls organs or glands. The ANS is divided into two branches – the Sympathetic Nervous System (SNS) and the Parasympathetic Nervous System (PNS). Each sends impulses to glands so that they can respond in certain ways (Potter and Bolls 2012: 28). When this occurs it is called being *innervated* by that branch of the ANS. Most organs and glands in the body are *dually innervated*, which means they are connected to both the SNS and PNS which are constantly sending signals to both.

The SNS begins with clusters of neurons located on either side of the spinal cord in a section from near the tailbone to just below the shoulders. When activated these clusters, known as the ganglia, pass electrical impulses between each other. Innervation by the SNS results in preparation for the 4 F's: fight, flight, fright and sex. This SNS activation increases the heart rate as the body goes into flight or fight mode.

The PNS system neurons originate in the brain and the lowermost part of the spinal cord right at the end of the tailbone and deliver signals directly to the target organs – bypassing the SNS ganglial cord. Most describe the function of the PNS as being something like a program manager on a computer – running in the background and keeping in constant contact with all of the important programs but when the response becomes too exciting other programs are used. In summary the PNS and SNS systems are in a constant state of flux, but at the same time maintaining an equilibrium with each other unless the SNS is required far more than the PNS.

They are also important motivations for this study, particularly the final point by Lachmann et al (1979) that science should work on issues that are applicable to everyday life, or in this case how people's memories and emotions are affected by watching different types of political advertising. Lachmann's et al. (1979) point on science being able to be employed in everyday life similar to the point made by Dann et al. (2007) about the need for science to strengthen and justify the contribution made by political marketing research.