



MONASH University

Advertising and Algorithms
– the obvious gains and hidden losses of using
software with intelligent agent capabilities in the
creative process of art directors and copywriters

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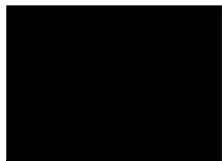
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ABSTRACT

Situated at the intersection of information technology, advertising and creativity theory, this thesis presents a detailed picture of the influence of autonomous software applications on the creative process of advertising art directors and copywriters. These applications, which are known in the field of information technology as ‘intelligent agents,’ commonly possess the ability to learn from the user and autonomously pursue their own goals. The search engine Google, which employs intelligent agency to pre-empt and personalise search results based on the collective and individual behaviour of users, is the investigation’s focal point due to its widespread use in the production of creative advertising. To understand how intelligent agents are deployed and received in industry practice, the thesis is organised around a qualitative study comprised of semi-structured interviews with eighteen art directors and copywriters in three Australian capital cities. The results from this study are analysed in terms of both theories of creative practice (stage-based and systems models) and the network society. The thesis finds that Google search provides participants with the ability to conveniently and quickly access converged media content that can evoke ideas for advertisements either immediately or at some stage in the future. However, an algorithmic bias towards the presentation of the most popular and familiar search results, and thus online content, emerges as a less obvious consequence of using a search engine with intelligent agent capabilities. The algorithms responsible for Google’s intelligent agency result in two tendencies. The first is the flattening of ideation possibilities evoked by Google’s pre-emption of users’ search intentions and personalisation of their search results. And secondly, the deployment of increasingly autonomous software applications that valorise efficiency, speed and new forms of flexibility are subtly shaping the institutional context in which advertising is produced. These outcomes are unfolding with limited practitioner awareness of the affordances and influences of software with intelligent agency on the creative process.

DECLARATION

This thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.



1 September 2015

Signature

Date

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Chapter One

INTRODUCTION

1.1 Context and background of the research

As a former copywriter charged with the responsibility of producing creative advertising I have always been fascinated by the question, 'Where do new ideas come from?' The achievement of creative outcomes is the primary function of most advertising agencies yet there is very little scholarly literature available on how new ideas are developed in this institutional context. Similarly, the question of how practitioners are influenced by what they are exposed to has received limited research attention. Numerous 'how to' guides and textbooks on creative practice serve as excellent resources for current and future practitioners that further the tradition of linking teaching with practice. However, these publications generally do not provide a critical analysis or discussion of the influence of emerging new media technologies on the process of developing new ideas. Despite a large amount of attention being placed on the value of creative ideas in industry publications, there appears to be a resistance to discussing how the novel ideas inherent in creative advertisements are developed. This institutional trait is perhaps a reflection of the romantic vision of a creator being struck by an inexplicable lightning bolt of ingenuity, and supports the observations that art directors and copywriters rarely reflect on the creative process and do not refer to explicit theories on how their work is produced (Kover 1995; Griffin & Morrison 2010).

This lack of reflection on the creative process occurs during a period when the field of advertising is going through immense change. Audiences are simultaneously using new media technologies to increase their consumption of media content across a growing number of channels and discovering new ways to avoid advertising messages. Advertising – a form of messaging that proliferated in the mass media age – is not dead, but it is being forced to change. Rather than relying predominantly on the repetition of messages to achieve its goal, contemporary advertising must seek

to engage audiences and encourage participation. The traditional justification for the production of creative advertising has focused on the capacity of a novel or surprising message to rise above the 'clutter' of other media content and draw attention to itself by entertaining or engaging an audience on an emotional level. In response to the emergence of new media channels, an increased number of messages being disseminated, and proliferating ways for audiences to avoid advertising, the ability of practitioners to produce creative advertising has never been more valuable (Belch & Belch 2013). However, it is not just the type of advertising being produced or the channels through which it is disseminated that is changing; the act of developing new ideas for advertisements is also being reshaped by new media technologies.

I started my career as an advertising copywriter in the mid 1990s when thick, glossy books on award-winning advertisements from around the world had a significant influence on creative outputs. The prevailing 'folk' or informal theory amongst creatives – the industry's collective term for art directors and copywriters – during this period was that practitioners could be inspired by these advertisements but should not copy them if they wanted to impress their peers and industry award judges. In other words, it was important to know what the field considered to be novel but for an advertisement to be 'creative' you had to build on what already existed to create something new. Rather than drawing inspiration from a limited supply of books on advertising creativity, today's creatives are provided with a continual flow of information via digital media. This includes dedicated websites on advertising creativity, blogs featuring sources of creative inspiration from around the world, social media sharing of amusing or evocative memes and ever-expanding online libraries of audio-visual materials. This range of sources of inspiration is so strong, so pervasive and so abundant that practitioners require assistance to discover and retrieve online content. This assistance is increasingly being offered by software that automates the action of filtering online content; prime amongst these are intelligent agents, applications that possesses capacity to 'anticipate, adapt and actively seek to ways to support users' (Bradshaw 1997, p. iv).

Broadly speaking, intelligent agents turn software components into proactive processes (Faltings 2000, p. 2). Unlike software applications that wait to be told what to do by human users or

other software programs, intelligent agents observe their environment and act in response without requiring explicit commands (Faltings 2000, p. 2). While the concept of an intelligent agent first emerged in the mid 20th century (Bradshaw 1997), these programs were not applied in knowledge work practice until the growth of the Internet. The linking of online databases on a mass scale provided both a reason for the use of intelligent agents, such as Internet user concerns about 'information overload', and the networking capacity required for intelligent agent programs to communicate with each other to fulfil their goals. Today intelligent agents buy and sell products on behalf of their human users. They act as video game players that learn from their human opponents and react autonomously. Streaming video services have developed recommendation agents that suggest content a user may like to watch based on their previous viewing habits. While these examples relate to entertainment or lifestyle uses, intelligent agents are widely deployed in military, aviation and manufacturing contexts where they fulfil goals autonomously in response to changing environmental factors. However, to date the most widely used application of intelligent agency has emerged in response to the need to navigate the Internet. As such, intelligent agents are being applied in knowledge work fields such as advertising production, with adaptive search engines, digital assistants and recommendation programs emerging to complete tasks on behalf of their users without having to be specifically told what to do or when to do it.

Echoing media theorist Marshall McLuhan, *Wired* co-founder Kevin Kelly writes, 'The least noticed trends are usually the most subversive ones' (2006, p. 39). Largely without noticing, we have arrived at the point where intelligent agents are being applied in all areas of social activity. We do not discuss intelligent agents because they often function as part of a system of agent and non-agent technologies; they are out of sight and thus out of mind. For instance, the intelligent agents responsible for Google's personalisation of search results operates 'behind the scenes' and sits below the user's awareness. This is the case for most widely used intelligent agents, but there are exceptions. Digital assistants for mobile devices, such as Apple's Siri and Google Now, present themselves more obviously to the user as a result of having 'agent' interfaces. Yet despite their ubiquity, the ways in which intelligent agents influence their human users are not commonly explored in the social sciences and

thus raise the question, 'How such a phenomenon can be examined?' If we understand this research object in terms of social life, it can be investigated in relation to a specific activity – how it affects actual users, and specifically its influence on a highly specialised area of creative practice.

This interdisciplinary dissertation sits at the intersection of information technology, advertising and creativity. To understand the influence of intelligent agents on the everyday tasks of art directors and copywriters, these three fields are explored independently before being merged into a connected argument that applies both theoretical insights and empirical data. An understanding of the field of intelligent agents reveals why this approach to computing – one initiated in artificial intelligence research – has materialised without broader discussion of its affordances and influences in media and social science research. Consideration of the Australian advertising industry highlights the changing institutional environment in which intelligent agents are being deployed. And an examination of creativity in an advertising context identifies the behaviours and socio-cultural conditions that intelligent agents are capable of shaping. Knowledge of these three fields provides a context within which to explore the nature of a research object that is rarely considered in new media theory. In response, an 'inductive' approach to the writing of this dissertation has been taken, as I was aware at the start of the research process that emerging forms of intelligent agency were capable of having an influence on advertising creativity but not exactly how it manifests in practice.

The influence of new media technologies in a general sense on the creative process of art directors and copywriters is underexplored. Previous studies on the everyday tasks of advertising creatives have tended to concentrate on the relationships amongst those in the field of advertising rather than the broader social context in which their work is produced. There are some notable exceptions, including Kover's (1995) study on the implicit communication theories applied by advertising copywriters, which revealed that practitioners communicate to an imagined audience when constructing messages. Vanden Bergh and Stuhlfaut (2006) consider the influence of the socio-cultural relationships on advertising production, while Johar, Holbrooke and Stern (2001) and Goldenberg, Mazursky and Soloman (1999) examine how existing advertisements shape future creative outcomes through their communication of templates or narrative patterns. Importantly these

studies emphasise the idea that practitioners do not construct messages in a social vacuum and that 'internalised' ideation is the result of finding novel relationships between external cultural representations. However, existing research rarely considers the media channels, traditional or new, used by practitioners to discover or recall the research material that informs creative advertising; yet to be discussed is the effect of adaptive forms of software on creative practice in advertising.

1.2 Research questions

The aim of this dissertation is to examine the nascent influence of intelligent agents, as exemplified by Google search, on the creative process of advertising art directors and copywriters. The research is guided by four main research questions:

RQ1: What is gained and what is lost in the creative process of advertising art directors and copywriters due to their use of software with intelligent agents capabilities, such as Google search?

This question responds to this thesis' overarching inquiry. The field of intelligent agents was found to be large and growing with numerous approaches to defining and exemplifying the research object in existence. To provide this thesis with a manageable scope, it was decided that Google search – a form of software that has intelligent agent capabilities and is widely used by art directors and copywriters – should be the thesis' principal point of investigation.

RQ2: Do the values embedded in Google search have an influence on the socio-cultural context in which creative advertising is produced?

A consideration of literature on the affordances and influences of Google search revealed that this widely used form of intelligent agency is capable of shaping more than just search outcomes. This question explores whether the values of the organisation that has engineered this adaptive search engine shape how the software is applied in practice. Accordingly, it looks at whether Google search conditions or is conditioned by the socio-cultural context in which advertising is produced.

RQ3: How do the autonomous functions of Google search influence the creative process?

The creative process is commonly viewed as an internalised series of cognitive actions that relies heavily on existing knowledge and experience. However, practitioners are greatly influenced by the domain in which they operate, and are commonly required to seek new sources of information that are capable of triggering a novel association. To balance the socio-cultural approach of RQ2, this question explores the influence of the adaptive search engine on creative practitioners' cognition and behaviour.

RQ4: Are art directors and copywriters aware of the implications of intelligent agent use on the creative process?

This research question aims to understand why this form of software, widely applied across a multitude of domains, is not commonly discussed outside information and communications technology (ICT) circles. In addition, it explores whether advertising art directors and copywriters, practitioners who specialise in communication, are aware of a technology that fulfils communicative acts on behalf of the user and if their level of awareness has an influence on their use of the technology.

1.3 Research method

In order to address the above research questions, this thesis integrates a qualitative study with theoretical research drawn from the fields of information technology, advertising and creative practice. In the qualitative study, eighteen practitioners currently working as art directors or copywriters in the three Australian cities of Melbourne, Sydney and Brisbane are interviewed using a semi-structured question format.

The qualitative research method is best suited to studying an incipient trend in creative work due to the largely invisible nature of intelligent agents in work practice. A theoretical context is used to interpret participant responses in which they identify not just what they do in practice but also what

they perceive they do. This study of practitioner perceptions serves as a base for exploration of how a broad technological change is understood at the time of its emergence.

Two creative process models are employed to analyse how the use of intelligent agents relates to advertising creative practice. The first is the 'classic' or stage-based model developed by Wallas (1926) and applied to advertising production by Young (2003), which focuses on creativity as a sequence of individual actions. While criticised for its sequential approach (Bengtson 1982; Lubart 2001), the stage-based model provides a means of framing discussion of when and how intelligent agents are deployed in creative practice. The systems model of creativity (Csikszentmihalyi 1988; Vanden Bergh & Stuhlfaut 2006; McIntyre 2012) traces the influence of relationships between the creator, the field that evaluates the creativity of their outputs, and the wider cultural domain that provides the informational material that is shaped into creative advertising.

Creativity theory alone is not enough to investigate the social effects of technological change on a specialist field of practice. Accordingly, network society theory, particularly the work of Manuel Castells (1996) and Pierre Levy (2001), and critiques of search engine culture, such as those presented by Hillis, Petit and Jarrett (2013) and Vaidhyathan (2011), provide means of understanding how Google's intelligent agency operates within the communicative context of advertising creativity.

1.4 Thesis structure

The thesis structure responds to the interdisciplinary nature of its inquiry by beginning with a discussion of intelligent agents, advertising and creative practice before turning to the interrogation of these fields in the qualitative study.

Chapter Two is the first of three background chapters. It looks at the field of intelligent agents by reviewing literature on the software's history, definitions, characteristics and categories before examining the functionality and influence of Google search. In doing so, this chapter provides an understanding of an emergent form of computing that has been discussed for some time by ICT developers and researchers but has only recently been widely applied in knowledge work contexts. This chapter points out that the affordances and influences of this research object can only partially be

explained by network society theory and must take into consideration other theories of ICT use in media and communication.

Chapter Three examines the social and institutional context in which creative advertising is developed. It describes the nature and role of creative advertising within the broader context of advertising production in Australia. Importantly, the chapter examines why a high value is placed on the concept of creativity by the advertising industry and discusses the conditions that support and hinder the pursuit of novel outcomes. Chapter Three also considers the changes occurring within the advertising industry in response to the widespread avoidance of advertising messages by contemporary audiences as a result of their increased use of digital technologies.

Chapter Four uses two models of creativity – the classic or four-stage model of the creative process (Wallas 1926; Lubart 2001; Young 2003) and the systems theory of creativity (Csikszentmihalyi 1988; Vanden Bergh & Stuhlfaut 2006; McIntyre 2012) – to identify the creative process actions of art directors and copywriters. Rather than sitting in opposition to each other, the two models are complementary, providing a comprehensive means of understanding the production of advertising creativity as both an individually and socially determined series of actions. The use of this framework to examine the everyday tasks of practitioners provides a means of understanding how software applications with adaptive filtering mechanisms are capable of influencing the way in which practitioners conduct their research actions during the creative process.

Chapter Five describes and justifies the qualitative research method selected for this study's empirical component. It explains why the research method of interviewing eighteen art directors and copywriters using a semi-structured question format to collect detailed 'insider accounts' is an appropriate data collection technique. In addition to explaining data gathering processes, it outlines the data analysis approach and critically reflects on my role as researcher.

Chapter Six applies the concepts and models introduced in Chapters Two, Three and Four to analyse the study's empirical findings. This analysis delineates the themes that emerged from participant reflections on their creative practice, the institutional context in which creative advertising is produced, and the influence of new media technologies on information gathering and knowledge

recall. A narrative flow is achieved through the presentation of themes within four dimensions of practice: perceptions of advertising creativity; discussion of everyday creative process tasks; use of Google search in the creative process; and awareness of intelligent agent use in the creative process.

Building on the analysis presented in Chapter Six, Chapter Seven discusses the implications of intelligent agent use on the creative practice of advertising art directors and copywriters. The application of network society theory and literature on the affordances and influences of Google search allows the thesis to situate this activity within the present but also speculate on the future implications of a type of software that is set to have much wider application. Implications are divided into three sections. The first section examines whether the highly structured affordances of pre-emptive software, such as Google search, are capable of reshaping the socio-cultural context in which creative advertising is produced. Specifically, this section investigates whether the use of Google encourages a move towards a form of informational Taylorism – an efficiency-focused approach to ideation – in advertising creative practice. The second section focuses on the use of Google search as a means of discovering new information and recovering the known. Accordingly, the effect of Google search's algorithmic bias towards the presentation of popular or familiar search results is considered in terms of its influence on practitioners' formation of novel associations. The last section of this chapter considers whether Google search, while still an emergent form of intelligent agency, has been naturalised in its use, and considers the application of other forms of intelligent agency in the creative process.

And finally, Chapter Eight presents a series of general conclusions as a connected argument in response to the thesis' research questions. These conclusions emphasise the exploratory nature of this investigation, one designed to explore a form of communication on the cusp of change.

1.5 Scope and limitations

In order to narrow the scope, this study does not evaluate the influence of intelligent agent use on all forms of advertising; instead it focuses on creative advertising. Creative advertising consists of both novel and task appropriate elements; for instance, a novel or surprising element is often included to

attract an audience's attention to then communicate a selling proposition or encourage brand recall. In contrast, conventional advertising, which is also known in the industry as 'hard sell' or 'retail advertising', is understood to predominantly communicate a sales proposition. In addition, the thesis does not focus on digital campaigns or the use of 'big data' to communicate with consumers; instead it attends to the development of ideas for advertisements which may be communicated across both traditional and digital channels. It is also important to note that the term 'advertisement' is used in a general sense in this thesis to collectively describe the different types of marketing communication messages produced by art directors and copywriters. As such, the term 'advertisement' also describes a collection of thematically related advertisements, that is, an integrated campaign, which is communicated over several traditional and new media platforms.

While the high value placed on creative advertising by practitioners and advertising institutions is reinforced in Chapter Three, this study does not seek to investigate the efficacy of creative advertising in terms of achieving brand awareness or behavioural change amongst target audiences. The positive impact of creative advertising has been the subject of numerous previous studies (Dahlén, Rosengren & Torn 2008; Sheinin, Varki & Ashley 2011; Reinartz & Saffert 2013). Rather, this study focuses on the creative tasks undertaken by practitioners before a draft advertisement is presented to the client. In many cases a degree of compromise occurs after a client has provided feedback on an advertisement, an action that sometimes reshapes the original approach and is capable of decreasing its novelty (Hogg & Scoggins 2001). It is not the aim of this thesis to consider all of the actions that lead to a final advertisement (that is, its execution), but instead to focus on the influence of emergent software on the creation of new ideas.

Google is not the only technology with intelligent agent capabilities used by creatives but it is an influential one. The possibility exists that several types of intelligent agent are or may at some point in the future be used by advertising art directors and copywriters to fulfil creative process tasks. To work within a manageable field of inquiry this thesis predominantly considers the use of Google search in the creative process. As this study is focused on the development of ideas for advertisements, the influence of design software, such as Photoshop and InDesign, is not evaluated. While these programs

may include autonomous applications that 'decide for themselves' how a task should be fulfilled, both are predominantly used in the presentation of a creative concept for client feedback or its final execution rather than the ideation process itself.

The advertising function of Google, commonly referred to as Google AdWords or 'sponsored links', is not within the scope of this study. This thesis is primarily concerned with intelligent agents that influence the information discovery and knowledge retrieval tasks that occur when creatives are exposed to 'organic' search results. The term 'organic' refers to search engine results consisting of links to content that have been indexed and presented based on their relevance to the user rather than as a result of a financial agreement with the search engine company. As paid or sponsored links fall into a 'classifieds' or 'informational' approach to advertising (Spurgeon 2008, p. 21), their production rarely involves an extensive creative process.

The next chapter of this thesis will examine the concept of intelligent agents and explain why Google search is an influential form of this technology. It will then introduce the theoretical concepts that will frame discussion of the emerging implications of intelligent agent use in the creative process.

Chapter Two

INTELLIGENT AGENTS AND GOOGLE SEARCH

2.1 Introduction

There is no universal approach to defining the concept of an intelligent agent. This is largely a reflection of the many existing and emerging uses of intelligent agents and the numerous domains in which they are deployed. Yet despite this lack of consensus, ICT researchers use the term widely to describe programs that function autonomously in pursuit of their own goals. To provide a workable means of identifying the intelligent agent technologies used in the production of creative advertising, this chapter explores the history, definitions and applications of the concept, and in doing so reveals a field that has moved from its origins in artificial intelligence to its current focus on human–computer interaction (HCI). This mapping of the field indicates that rather than solely existing as individual software applications, intelligent agents commonly function within systems of programs. A user may therefore be unaware they are using an ‘intelligent agent’. Importantly, this chapter considers the role of user interfaces to explore the question of whether the degree of visibility exhibited by intelligent agent software influences its adoption by users. It posits that the affordances and influences of software systems with intelligent agent capabilities, such as Google search, do not occur in a social vacuum. To this end, an analytical framework consisting of network society theory (Castells 1996; van Dijk 2006; Hassan 2008) and critiques of search engine culture (Halavais 2009; Vaidyanathan 2011; Hillis, Petit & Jarrett 2013) are introduced. This approach frames the communicative relationship between advertising creatives and Google search within the broader social context of the transition from industrial to informational capitalism, a shift that both accommodates the emergence of intelligent agents and intensifies their influence.

2.2.1 A brief history of intelligent agents

The concept of an intelligent agent – software capable of autonomously inferring and executing an action – emerged from the field of artificial intelligence. Artificial intelligence pioneer John McCarthy was the first to formally describe the concept of an agent in the 1950s, with Oliver G Selfridge coining the term when the two worked together at the Massachusetts Institute of Technology (Bradshaw 1997, p. 4). Alan Kay explains McCarthy and Selfridge's concept:

They had the view that a system, when given a goal, could carry out the details of the appropriate computer operations and could ask for and receive advice, offered in human terms, when it was stuck. An agent would be a 'soft robot' living and doing its business within the computer's world. (Kay cited in Bradshaw 1997, p. 4)

This recollection indicates early forms of intelligent agents were required to exist in their own symbolic world with only limited interaction from the developer or user. According to Middleton (2002), this approach led to the development of intelligent agents that were limited in their problem solving abilities, as the symbolic worlds in which they existed were generally error-free computer-modelled environments. The imperative for intelligent agents to fulfil goals outside static environments led to an interest in cognitive scientist Marvin Minsky's theories of intelligence. In *The Society of Mind* (1986), Minsky suggested the human mind could be understood as a collection of relatively simple agents, each a specialist in a certain narrow field (Faltings 2000). Responding to Minsky's paradigm, researchers began to focus on developing intelligent agents that were capable of communication and coordination in real-world situations. This led to intelligent agent research at the end of the 20th century being dominated by multi-agent systems that interacted with each other to fulfil their goals, as well as intelligent agents with interfaces that enabled the system to learn about its user (Middleton 2002). This development represented a move away from the field of artificial intelligence, which had traditionally focused on cognitive modelling that involved little external interaction with other programs and humans (Tweedale et al. 2007).

Intelligent agents that sensed their environment and acted autonomously in the pursuit of their own goals were increasingly being deployed in military and manufacturing applications during the 1990s. However it was not until the rapid growth of the Internet, and the inability of a single program

to manage this environment, that both academic and commercial interest was provoked. The networking of databases in the online environment suggested numerous uses for intelligent agents, many in response to fears of 'information overload',¹ and provided a more general infrastructure for communications between intelligent agents (Faltings 2000). By the late 1990s a growing amount of research was being published² on the subject by software researchers and designers who considered themselves part of the new intelligent-agent-based computing field rather than the robotics or artificial intelligence disciplines (Middleton 2002). The impact of burgeoning research interest flowed into the public sphere with technology journalists speculating on the 'revolutionary' impact of intelligent agents that were in reality many years away from successful implementation (Nwana 1996, p. 36). The technology-focused lifestyle magazine *Wired* set the agenda for mass media publications to follow, with academic and journalist Nicholas Negroponte writing that intelligent agents were the 'unequivocal' future of computing (1995, p. 72).

Eager to take advantage of growing interest in the concept in the last decade of the 20th century, major ICT corporations, including Apple, Microsoft, SUN, IBM and Hewlett-Packard, started to heavily promote their development of intelligent agents (Faltings 2000, p. 4). One of the best known of these publicity efforts was the release of a video by Apple for its Knowledge Navigator device. The video presented a tablet-like computer with an interface featuring a representation of a human assistant – bow tied and well spoken – who pre-emptively fulfilled information gathering and filtering tasks on behalf of its human user (Johnson 1997). Apple's Knowledge Navigator was never released to the market, however a series of other assistants were developed shortly after. One of the most high-profile of these was Clippy the Paperclip, a software assistant that was included in Microsoft's Office 97 software package. Displayed in the form of an animated paper clip, Clippy was predominantly an interface link to a database of help topics. Rather than being a true agent that only appeared when needed, Clippy commonly frustrated its users by emerging when not required. For instance, as a user

¹ Such concerns were proclaimed in texts such as David Shenk's *Data Smog: Surviving the Information Glut* (1997), a 'popular science' meditation on the information abundance.

² Based on citations gathered from the IEEE Explore online database of academic periodicals for the terms 'intelligent agents' or 'software agents' there were 15 articles published on the topic in 1990, 98 in 1995, 453 in 2000 and 892 in 2005.

commenced writing a letter in the Word program Clippy would materialise in animated form with a link to a help document on how to format this correspondence. It offered assistance without the ability to know whether that assistance was required. Like its precursor at Microsoft, the animated assistant Microsoft Bob, Clippy failed to provide users with an appropriate degree of usability and was discontinued following wide-ranging ridicule. By its very form, that of a paperclip with human-like facial features, Clippy gave the impression that it possessed a degree of human-like intelligence; however, it quickly became apparent that this application was unable to learn from its users' behaviours and as a result became more of an unnecessary distraction than a genuinely useful assistant. The reason why Clippy, which has been described by *Time* magazine as one of mankind's 50 worst inventions (Gentilviso 2010), and other agents of its ilk failed can be summed up by the following observation:

I find little justification for most of the commercial offerings that call themselves agents. Most of them tend to excessively anthropomorphise the software, and then conclude that it must be an agent because of that very anthropomorphisation, while simultaneously failing to provide any sort of discourse or 'social contact' between the user and the agent. (Foner 1993, p. 39)

Foner's criticism suggests these early intelligent agents lacked the social abilities required to monitor their users' behaviours and apply that knowledge when fulfilling future tasks. According to Norman, anthropomorphised intelligent agents fail to achieve widespread use when an expectation gap emerges: 'Have a system act as if it has its own goals and intelligence, and there is an expectation of full knowledge and understanding of human goals' (1997, p. 52). He also suggests that developers often look too far into the future to imagine intelligent agents completing perfect and complete actions as opposed to considering more limited applications in the context of contemporary technology. This criticism was echoed by other developers who claimed that the intelligent agent label was being so widely and often incorrectly used that it had become a 'noise' term (Wooldridge & Jennings 1995, p. 4) or 'meaningless' (Shoham 1997, p. 271). Yet despite these concerns, many in the field remained optimistic:

Agents are here to stay, not least because of their diversity, their wide range of applicability and the broad spectrum of companies investing in them. As we move further and further into the information age, any information-based organisation which does not invest in agent technology may be committing commercial hara-kiri. (Nwana 1996, p. 5)

Nwana's quote indicates both the problems and the potential of the concept of an intelligent agent. The diversity of intelligent agent applications means it is not possible to develop a universal definition or representative exemplar. Yet it is clear that the proliferation of digital media as a result of the growth of the Internet has resulted in a need for autonomous forms of software that can manage this information. In the same article, Nwana claims that the successful development of intelligent agents would occur as a result of their integration within everyday objects and therefore follow an 'evolutionary'³ rather than 'revolutionary' process. As a result, they would not necessarily draw attention to themselves for being 'intelligent agents' (1996, p. 36). This prediction has proved to be correct, with intelligent agents maturing into applications, many of which are embedded in or linked to other forms of software, and which are increasingly capable of autonomously fulfilling their own goals in response to an understanding of their user's requirements. The most widely used example of this approach is Google search, a program that plays a key role in the everyday tasks of knowledge workers, including advertising copywriters and art directors.

A review of the history of intelligent agents reinforces the importance of the social capabilities of intelligent agents, a trait that differentiates this field from the precursory field of artificial intelligence. Once technology's 'next big thing', the concept of an intelligent agent is rarely discussed outside ICT circles. This is an outcome of the field's need to mature slowly and with less focus on anthropomorphised interfaces that are capable of encouraging unrealistic user expectations.

2.2.2 Defining the term 'intelligent agent'

Given the diversity of applications that have been described as intelligent agents, it is not surprising that there is limited agreement on how best to define the term, with researchers often formulating definitions that accommodate their own area of speciality. For instance, Russell and Norvig state: 'An agent is anything that can be viewed as perceiving its environment through sensors and acting upon that environment through effectors' (2010, p. 34). While this definition reflects the authors' research

³ This incremental growth can be read as a reflection of Wirth's Law that dictates the speed of advances in software development slows as the power of computer hardware increases (Ross 2003, p. 35).

backgrounds in artificial intelligence and captures the autonomous nature of the concept, it fails to acknowledge the role of human–computer interaction. Other researchers place greater emphasis on social contact: ‘What makes a simple piece of software an agent is its ability to communicate in a “social” environment, to make autonomous decisions, and to be proactive on behalf of its user’ (Tamma et al. 2005, p. vii). In this definition the ability to cooperate refers not only to cooperation between intelligent agent and user but also amongst intelligent agents with different roles. This is an important quality for those developers who believe all agents should possess the ability to cooperate with each other as part of a multi-agent system (Nwana 1996). With the following definition, Haag and Cummings take the middle ground by covering aspects that are important to both the artificial intelligence and HCI-focused intelligent agent researchers: ‘Intelligent agents incorporate some form of AI – like reasoning and learning – to assist you, or act on your behalf, in performing repetitive computer-related tasks’ (2013, p. 114). The broad scope of this definition is useful as it accommodates the diversity within the intelligent agent community yet still highlights its difference from the precursory field of artificial intelligence.

Other researchers have suggested the use of metaphors as a means of explaining the concept; once again these approaches reflect each developer’s research imperatives. Maes, a researcher predominantly interested in online applications, favours the metaphor of a ‘personal assistant’ when describing intelligent agents that alleviate information overload by collaborating with the user in the same work environment through learning the user’s interests, habits and preferences (1997, p. 146). Negroponte (1994) has offered two metaphors for intelligent agents: a ‘virtual butler’ that performs tasks such as email filtering, scheduling appointments, offering advice and running errands; and a ‘digital sister-in-law’, a trusted adviser that is not only an expert on a range of areas as a result of online information analysis but also an authority on its user’s preferences. While the virtual butler performs errands only and the digital sister-in-law provides advice, Negroponte sees both as performing labour-saving tasks that the user would prefer not to undertake themselves. In a similar vein, Foner suggests intelligent agents can be thought of as ‘a sort of mental slave that one doesn’t have to feel bad about using as a slave’ (1993, p. 40). While these metaphors are evocative, they – as is

the case with Haag and Cummings' middle-ground definition – ultimately limit the conceptualisation of intelligent agents to performing tasks the user would prefer to delegate to save time. As such, they ignore the application of intelligent agents to complement human skills by, for example, teaching (Boy 1997; Baylor 1999) or inspiring creativity (Boden 1994; Candy & Edmonds 2000). In these instances intelligent agents are still time-saving devices but exist more as collaborators with human-like skills than the user's proxy for repetitive tasks. Of these analogies, Negroponte's 'digital butler' is useful for the type of intelligent agents that are likely to be employed in the creative process as it suggests that intelligent agents serve their purpose most effectively if they only appear when required – for instance to provide information or clarify a request – and at all other times recede into the background.

A consideration of literal and figurative definitions of intelligent agents reveals the problems that result from attempting to identify a universal meaning of the term. Accordingly, it is useful to view intelligent agents not as a discrete category but instead as an approach to computing that exhibits a series of particular qualities. Tweedale et al. (2007) support this contention by stating that the continued growth of intelligent agents is occurring within the context of a transition from object-oriented computing, software that has to wait to be told what to do by a human user or other programs (Lin et al. 2007), to an agent-oriented paradigm in which programs work autonomously and proactively in pursuit of their own goals on behalf of the user. This conclusion, one that can be read as the belief that most software is moving towards some degree of autonomy that is linked to social capacity, appears to confirm the prediction made by Negroponte (1995) more than a decade earlier that agents are the unequivocal future of computing.

2.2.3 Characteristics of intelligent agents

Not surprisingly for a diverse field that has emerged from the confluence of ICT disciplines, several methods of characterising intelligent agents have emerged. Three approaches (see Table 2.1) will be reviewed to identify characteristics capable of anchoring the study of a particular software application in creative practice.

Table 2.1: Three approaches to identifying intelligent agent characteristics

Etzioni & Weld (1995)	Nwana (1996)	Wooldridge & Jennings (1995)
<ul style="list-style-type: none"> • Autonomous • Goal oriented • Collaborative • Flexible • Self-starting • Temporal continuity • Character • Communicative • Adaptive • Mobile 	<ul style="list-style-type: none"> • Autonomy • Ability to learn • Cooperation 	<ul style="list-style-type: none"> • Autonomy • Sociability • Reactivity • Pro-activeness

Etzioni and Weld (1995, pp. 3–4) offer a starting point from which to consider intelligent agent characteristics by offering a list of ‘desirable’ traits. The authors argue that ‘autonomy’, the ability of an intelligent agent to exercise some control of its actions, is a required characteristic. The capacity to be ‘goal oriented’ is the ability of an agent to decide ‘how and when’ to fulfil an action. The characteristic of being ‘collaborative’ indicates that the intelligent agent has the ability to modify requests, ask for clarification or refuse to complete some actions. ‘Flexibility’ is exhibited when an intelligent agent exercises non-scripted actions. The trait of being ‘self-starting’ is manifest when an intelligent agent senses a change in its environment and decides when to act on that change. ‘Temporal continuity’ means there is no definite timeline for the agent’s role. The attribute of ‘character’ is present when an intelligent agent exhibits a believable personality or emotional state. An intelligent agent is said to be ‘communicative’ when it engages in complex communications with other agents and users. ‘Adaptive’ refers to the ability of an intelligent agent to be customised to suit its user’s preferences. And the trait of ‘mobility’ refers to an ability to move across different machines, system architectures and platforms. Etzioni and Weld do not suggest that any one intelligent agent should, or would need to, possess all of these characteristics. For example, the characteristic of mobility would be essential to a personal

communications agent required to review email content as well as voice and text message content. Yet this mobility may be of little use to an agent that performs a specialised task within a specific program, such as Microsoft Word or Adobe InDesign. While suggestive of the many possible traits of intelligent agents, a 'mix and match' approach is problematic as many of the traits listed overlap. For instance, goal oriented could be considered to be a form of autonomy, while character could be considered to be a mode in which an agent is communicative.

Rather than attempting to develop an all-encompassing list of characteristics, other authors have sought to consolidate the attributes of intelligent agents. Nwana (1996, p. 6) defines intelligent agents by the traits of 'autonomy', 'the ability to learn' and 'cooperation'. This understanding of autonomy closely resembles Etzioni and Weld's description, however she takes a different approach with regard to the traits of learning and cooperation. For Nwana, learning characterises an agent's ability to react to and/or interact with its external environment. This environment might be the physical world, a graphical user interface, a multi-agent system, the Internet or perhaps a combination of different environments (Wooldridge & Jennings 1995). The attribute of cooperation is considered to encompass communication and coordination amongst agents and in terms of human-computer interaction. As previously mentioned, the name 'intelligent agent' can be applied to a vast number of applications and uses; descriptions of intelligent agent traits reflect this diversity. Yet despite this, a consolidated approach to their characteristics, as offered by Nwana, provides a workable means of distinguishing and understanding the information filtering applications that are relevant to this dissertation.

Intelligent agent properties have also been considered in terms of the complexity of their goals and environment, with researchers characterising this software as being either 'weak' or 'strong'. For instance, a 'smart folder' in an email application that automatically sorts messages based on user preferences and behaviours could be conceptualised as a weak intelligent agent. According to Wooldridge and Jennings (1995, pp. 4-5), this weak agent would possess the traits of autonomy, sociability, reactivity and pro-activeness. A stronger notion of agency, one common amongst artificial intelligence researchers, refers to software that exhibits the properties of a weak agent in addition to possessing the 'mental states' of knowledge, belief, intention and obligation (Shoham 1993, p. 51). An

example, one that has not yet been developed, would be an intelligent agent program that continually browses online media with a knowledge of a creative worker's current project imperatives; when this agent finds sources of inspiration it believes are suitable for a project, it would decide on the best way of presenting this information to its user, that is, by email, text message or opening a browser window, based on an understanding of his or her physical location and work priorities. While useful as a means of appreciating the evolution of intelligent agents, the allocation of traits based on complexity can be problematic. For instance, to be pro-active, weak agents are required to analyse collected information, which is indicative of building and applying knowledge – a trait Wooldridge and Jennings associate only with strong agents. This point aside, a consideration of the weak-strong dichotomy indicates a desire by researchers to integrate more human-centric attributes into future intelligent agents to complement human skills, as opposed to developing applications that, despite presenting a degree of autonomy, are primarily labour-saving devices.

This dissertation will apply Nwana's approach to its discussion of intelligent agents – the properties of autonomy, the ability to learn and cooperation – to provide a means of distinguishing intelligent agents from other software programs that are required to wait for instruction from their user or other programs. The concept of a 'strong' agent, while flawed with regard to the notion of knowledge building which today's 'weak' agents already possess to some degree, is also useful as it indicates the characteristics that intelligent agents may possess in the future.

2.2.4 Intelligent agent typologies

As there is the potential for any listing of intelligent agents to incorporate hundreds of possible forms or uses, numerous typologies have been developed to map out the field. However, there is little consensus within the field with regard to a standardised typology. For the purpose of this thesis it is useful to briefly explore one typology to indicate the variety of agents currently deployed and their applications. This discussion is supplemented by my own distinction between different types of intelligent agents based on the degree to which they are visible to the user. This is important because this thesis focuses on user interaction with intelligent agents rather than simply their software capability.

The approach to categorisation taken by Haag and Cummings (2013 pp. 114–115) provides a useful introduction to different applications of intelligent agency. The authors identify four types of intelligent agent based on analytical capabilities: information agents, monitoring and surveillance agents, user or personal agents and data-mining agents. Information agents are described as applications that continually search and analyse information based on a user's request; for instance, shopping agents that compare products and find the best price. Monitoring and surveillance agents observe and report on an entity of interest, for example a network, or equipment functioning. User or personal agents perform actions on behalf of the user in communicative roles, such as personal intelligent assistants for mobile devices. Data-mining agents are described as operating in 'data warehouses' to find patterns in information on behalf of the user that would not necessarily be visible in conventional data gathering processes. Importantly, Haag and Cummings (2013) reinforce that intelligent agents are capable of working both individually and collaboratively when they exist as part of a system of software.

As human–computer interaction lies at the heart of this dissertation, distinctions based on what intelligent agents do or the domain in which they exist are of less importance than the user's awareness that they are using software that pre-emptively makes decisions on their behalf. Accordingly, intelligent agents will be notionally separated with regard to their visibility to the user. They will be categorised as possessing either an independent or 'standalone' user interface, such as the visual and audio interface of the Siri digital assistant for mobile ICT devices, or as integrated or 'behind the scenes' agents that are part of a system of software, as is the case with Google search. This model presents a clear distinction between intelligent agents that are visible to the user and those that do not indicate their existence, a useful binary for evaluating the influence of intelligent agents on creative practice, as discussed in later chapters.

2.2.5 Intelligent agent user interfaces

The way in which intelligent agent interfaces are presented to the user and two forms of interaction between user and software, direct manipulation and indirect manipulation, provide insight into how

autonomous software is perceived and integrated into everyday life. While intelligent agents are commonly presented as a graphic user interface (GUI) that allows the user to interact by means of icons and text-based dialogue, anthropomorphised interfaces have also been developed for intelligent agents albeit with varying degrees of success. Most computer programs and many intelligent agents rely on some form of direct manipulation on behalf of the user through a user interface. In contrast, the indirect manipulation model describes the capacity of intelligent agents to take the initiative by pre-empting its user's requirements. This second approach has been identified by intelligent agent pioneer Patti Maes (1997) as the future of computing in a general sense.

An understanding of the two modes of interaction, commonly identified as direct manipulation and indirect manipulation, provides further insight into the functioning of intelligent agents. The basis of traditional human-computer interaction, direct manipulation, requires the user to initiate interaction through an exchange of information with the program, generally through a graphic user interface. Word processing, computer games and spreadsheets are examples of this approach. In this model, the computer is predominantly a passive entity waiting to fulfil a set of instructions by the user who is required to perform every task and control the events that arise from the interaction (Maes, Shneiderman & Miller 1997; López Jaquero et al. 2009). In contrast, the indirect manipulation model suggests that: 'Instead of user-initiated interaction via commands and/or direct manipulation, the user is engaged in a cooperative process in which both human and computer agents initiate communication, monitor events, and perform tasks' (Maes, Shneiderman & Miller 1997, p. 146). It is this approach that informs the development of those intelligent agents that are required to communicate directly with human users and act independently on this information. As Maes' definition suggests, intelligent agents may require both direct and indirect manipulation. Rather than existing in opposition, types of interaction between users and software can be best understood as existing as a continuum with direct manipulation at one pole and indirect manipulation at the other. It is useful to note that some agents require little or no direct manipulation. For instance, adaptive search engines build a profile of each user based on watching his or her behaviour and then use this knowledge to filter search results. Because programs that require little direct manipulation in effect function 'behind the scenes' they can

be integrated into existing programs or connected to existing tasks without the user being aware of their existence, thus avoiding the creation of false expectations. This model, one predicted by Maes (1997), is likely to see intelligent agents embedded into more everyday items and as such represents a significant shift in the nature of computing.

While not all intelligent agents are required to directly communicate with the user, a large number have been developed as both character and non-character user interfaces with varying degrees of success. Apple's personal assistant for mobile digital devices, Siri, is an example of this type of intelligent agent. However the likelihood that this particular agent is being applied in creative practice in its current form is low due to its focus on mobile communication. Intelligent agent interfaces that draw less attention to themselves through the requirement for the user to, for example, click an icon or click boxes, appears to have been more widely embraced. For instance, the online radio station Pandora gives users the option to indicate their music preferences by clicking 'thumbs up' or 'thumbs down' buttons when a particular song is playing; this knowledge is then used to help the program pre-emptively recommend songs based on the preferences of other users with similar profiles, a form of collaborative filtering. This approach, which still requires some direct manipulation to learn from the user, is likely to subside in favour of greater indirect manipulation with intelligent agents working below the user's awareness.

This review of literature on intelligent agents has revealed a series of features that are relevant to the study of adaptive technologies in the context of the production of creative advertising. Three defining features of intelligent agents suggested by Nwana (1996) – autonomy, the ability to learn and cooperation – serve as a means of differentiating this form of software from other programs used by art directors and copywriters. For instance, Microsoft Word waits to be told what to do by its user and will not autonomously adjust its functioning, while programs with intelligent agent capabilities, such as Google search, seek to pre-empt the user's intention and adapt their outputs accordingly. It is important to note that not all intelligent agents are required to have identifiable character interfaces, with some intelligent agents working behind the scenes and not making themselves visible to the user.

These intelligent agents are part of a system of software that accommodates the introduction of adaptive capabilities without the need to change to the existing interface of a program. These forms of intelligent agent often require little direct manipulation on behalf of the user. Instead they observe the user's behaviours to collect the implicit feedback required to build knowledge that can be applied to future tasks. It is also useful to consider a metaphoric approach to describing intelligent agents with Negroponte's description of these programs or systems as 'digital butlers' (1997), a conceptualisation that reinforces the idea that to be effective, intelligent agents should only be visible to the user when required.

2.3 Google search and intelligent agency

Google search has emerged as a widely applied form of intelligent agency. The way in which Google search fulfils its primary task as an information retrieval program reveals the presence of the three most commonly identified primary intelligent agent traits: autonomy, the ability to learn and cooperation (Nwana 1996). This conceptualisation is reinforced in descriptions of Google as an 'adaptive search engine' due to its ability to collect implicit feedback to infer and act on a user's search intention (Lorigo et al. 2006). The 'intelligence' inherent in Google's processing of search results is indicative of an evolutionary movement towards adaptive software that has emerged from the mass networking of ICTs. Google search autonomously filters online content based on a large number of factors but, more importantly, inferences are drawn based on knowledge of the collective and individual behaviours of web users. Software algorithms, procedures or sets of rules that solve well-defined computational problems (Cormen et al. 2009), perform this analysis. Two algorithms are of particular interest with regard to the discussion of Google search as an intelligent agent. The first is PageRank, which places pages with high-ranking in-bound links higher in the search result listings. The second, Google search's personalisation algorithm, determines results and pre-emptively search queries on the basis of data collected about the search engine user. While the exact workings of both algorithms are not made available to those outside of Google, and the nature of these algorithms exists

in a constant state of adaptation, an examination of the literature on PageRank analysis and personalisation filtering suggests a number of implications for advertising art directors and copywriters.

2.3.1 The nature of search engines

Search engines have become a ubiquitous means of navigating networked media yet do not attract much research interest with regard to their influence on how users are exposed to information (Jensen 2012). This section provides a foundation for the study of Google search, an adaptive search engine, by identifying key concepts surrounding its functioning and use.

Major web search engines, including Google, Yahoo! and Bing, function as information retrieval systems that allow users to complete keyword searches of text, image, audio, video and other files that have been made available on the Internet. This process is achieved through the collection and indexing of online content that is presented to web users as a filtered list of links, often with page summaries, in response to a user's search query. Contemporary web search engines consist of three main components: the crawler, index, and runtime or query processor (Battelle 2005). The crawler program moves from link to link across the web to collect online content that is archived as 'raw' data before being indexed and stored in a database of cached web page content and other file types (Figure 2.1). The data in this index is analysed using a number of algorithms that allow a ranked list of results to be presented to the user via the runtime system or query process, the search engine's user interface. Search engines can be characterised as either horizontal or vertical in nature. Google search is a horizontal or general search engine as it seeks to index all publicly available content on the Internet (Halavais 2009). Rather than seeking to index the available Internet in its entirety, vertical search engines focus on a particular domain (Battelle 2005), for example the image sharing website iStockphoto has the specific function of aggregating, indexing and presenting user submitted image, sound and video files for use in marketing communication materials.

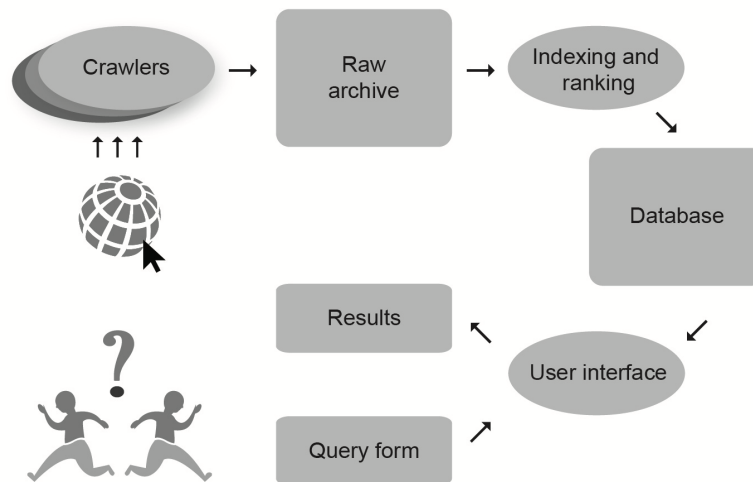


Figure 2.1: Conceptual organisation of a typical horizontal search engine
(adapted from Halavais 2009, p. 15, Figure 1.1)

Depending on the query, links to online content may be presented to the user by an Internet search engine as ‘organic’ and ‘paid’ search results. Organic results are an index of online content generated by the ‘normal functioning’ of the search engine (Halavais 2009, p. 80), that is, indexing processes that are not predominantly shaped by external commercial interests, such as paid search engine advertising. Referring to the traditional boundaries of editorial and advertising content presented in mass media journalism, Battelle (2005) and Diaz (2008) describe organic search as an index of editorial content in contrast to paid search results, which present advertiser links in response to the user’s search query. Search engine best practice, which Hillis, Petit and Jarrett (2013) suggest has been predominantly shaped by the success of Google search, dictates that these paid or targeted advertisements sit above or to the left of the organic results and are identified by a subhead that indicates their purpose, for example ‘Ads’ or ‘Ads relating to ...’. Google claims that algorithmically, advertising does not dictate the selection of organic search results (Chan 2012). However, as discussed by Hillis, Petit and Jarrett (2013), the collection of data based on a web user’s previous search activities is known to be integral to the display of both organic and paid results. It is also worth noting that not all search queries produce both organic and paid results. For instance, the search term ‘God’ attracts no paid results when entered into Google web search whereas ‘ugg boots’ delivers lists of paid

results that sit above and to the left and below the organic results. These examples suggest Google's ability to predict the intention of web users to some degree. Past experience has told search engine developers and their algorithms that the majority of people who enter the search term God have a different (re)search intention to those who are curious about ugg boots. This is just one example of the complex and multi-layered modes of communication between adaptive search engines and their users but is suggestive of the ability to apply various approaches to the pre-emption of a user's task that has seen Google emerge as the world's primary web search engine.

The increasing amount of digital information available as a result of the global networking of ICTs would suggest an expansion in the means of searching this content; however the opposite has occurred, with just one search engine emerging to dominate the field. On a global basis as at March 2013, 89.89 per cent of web users choose Google over other search engines; this figure is even higher in Australia for the same timeframe, with 93.05 per cent of local web users selecting Google search rather than the alternatives (StatCounter 2015). Various factors are responsible for this dominance. According to Goldman, the decision to use a particular search engine revolves around user perceptions of the relevancy of top results and the speed with which these results are presented. Moreover, he claims search engine users have come to expect search engines can 'read their minds' – or at least their search intention – with programs that are perceived to fail in this ability being avoided (Goldman 2005–2006, p. 196). A user preference for large (horizontal) rather than specialist search engines (vertical) has been noted by Hargittai (2007), while Vaidhyanathan (2011) suggests habit can dictate a user's decision to use a particular search engine. Google's success may also be an outcome of the perception that it is a utilitarian tool rather than a media channel with its own particular biases (Hillis, Petit & Jarrett 2013). Rather than appearing to exhibit the human biases that shape other media outlets, search engines are often seen as being objective due to the technological rather than human filtering of their results. This perception is misguided in a number of ways, with decisions by Google staff reducing the prominence of controversial online content, including for example anti-Semitic websites (Halavais 2009) and pornographic material (Vaidhyanathan 2011). Another form of bias emerges from the values embedded in the rules that govern search engine functionality. As Goldman

(2005–2006) points out, the choice of what filtering factors, or ‘signals’, to include in a search engine algorithm and the emphasis placed on each factor is ultimately based on human editorial judgments, those of software engineers and their employers.

2.3.2 Search engine algorithms and their biases

Google search’s ranking and personalisation algorithms are largely responsible for the ‘intelligence’ exhibited by the search engine. An understanding of the nature of these algorithms situates Google search as an existing intelligent agent that is in widespread use. The benefits of both algorithms are clear. They enable the search engine to filter millions of pages of online content on behalf of their user within seconds, yet an understanding of these algorithms also reveals the existence of largely unrecognised biases towards the most popular and potentially familiar online content.

Introduced in 1989, Google’s PageRank algorithm is an indexing process that analyses over 100 features of a page to ascertain the appropriateness of online content to the searcher’s query (Mayer cited in Diaz 2008). One of the most influential of these features is the number of web pages that have been linked to a page. This aspect of the PageRank algorithm was inspired by Google founder Larry Page’s appreciation of the academic citation system in which the number of times an academic’s work is cited by other authors provides a judgment of how important the published works of that academic is to his or her field (Pariser 2011). In effect, each in-bound link acts as a recommendation or ‘vote’ that is used to rank that page in terms of its ‘popularity’ with other web page authors. Importantly, these votes do not have an equal weighting; the vote of a page that has a large number of in-bound links lifts the ranking of the recipient page more than an in-bound link of a less known page (Goldman 2005–2006). Historically, the emergence of what can be understood as collaborative filtering marked a change in the algorithmic focus of search engines from the page author to page reader. PageRank reduces the agency of a page author, who to some degree is able to influence search engine ranking using metadata,⁴ and instead places greater emphasis on the collective judgments of web users to

⁴ Metadata can be understood as ‘data about data’ that provides the index with additional information about web content, for instance the date a photograph was taken, the language a web page’s content is written in or the page’s subject matter.

determine relevance. Hillis, Petit and Jarrett argue that the concept of relevance refers to the usefulness of the search results to the user and that 'Google's relevance privileges utilitarian value as a way of understanding, and it yokes utility to quality of search experience' (2013, p. 54). This notion of relevance is an outcome of the algorithm that allowed Google to outshine its competitors shortly after its implementation. In contrast to the simple keyword matching processes of existing search engines, PageRank allowed some standard of quality to be established. In introducing PageRank, Google merged quantity (the number of sites that link into a webpage as a means of relevance) with quality, which is understood as the appropriateness of search results to the user's query. However, as Halavais (2009) points out, relevance is a subjective notion. At its current stage of development, Google can only deliver this outcome in broad-brush strokes as it presents a 'generalised relevance', rather than a relevance that responds specifically to the user's query (Blanke 2005; Halavais 2009). Yet despite this, the success of Google has led to the notion of relevance being operationalised as the measure by which both developers and users comprehend the quality of the search results (Hillis, Petit & Jarrett 2013, p. 35).

While PageRank provides Google users with seemingly democratic search results that are not overly compromised by the search engine optimisation techniques of commercial entities, its voting system shares one of the limitations of electoral voting. Just as the winners are more prominent than the losers in elections in a two-party political system, PageRank draws attention to the most common viewpoints and diminishes the prominence of less conventional perspectives. The 'democratic' nature of PageRank is further compromised by the way in which search results are viewed. Highly ranked search results are more likely to be noticed in the first instance and subsequently more prone to be linked by another content developer than a less popular page that is difficult to find due to its lower indexation. The high ranking of the collaborative encyclopaedia Wikipedia in most search results due to its a large number of in-bound links is an outcome of a recursive trend, a phenomenon that has led researchers to identify a popularity bias that makes it difficult for new sites to be found, thereby reflecting the status quo rather than divergent and challenging ideas (Goldman 2005–06; Diaz 2008; Halavais 2009). While the extent of this algorithmic bias is difficult to gauge, it is clear that PageRank

has succeeded in improving the search experiences of the majority of Internet users. However, popularity – as gauged by a web page’s in-coming links – in itself does not necessarily ensure that a search result listing will be appropriate to a user’s particular needs, a condition no doubt recognised by Google engineers, who have more recently attempted to balance collaborative filtering with greater consideration of the individual.

In 2007 Google introduced an algorithm that analysed 57 personalisation factors to help it predict the search intent of each user (Pariser 2011, pp. 1–2). As a result of this algorithm it is possible for users of Google search to receive different search results for the same term. The search term ‘jaguar’, for example, may deliver results on the Central and South American cat for a Google user who has been profiled as a travel enthusiast, while someone who has been profiled as a car lover may receive results that revolve around the English automobile. Personalisation to some degree shapes every search result and, as noted earlier, also facilitates the delivery of targeted advertisements through Google’s AdWords service. The algorithm considers factors such as the device used to access the web, the Internet Protocol (IP) address of the user, and their search history (Google n.d.a). The IP address provides Google with an indication of the user’s location, an important tailoring instrument for search engine results. Less obvious to the user when viewing search results is the influence of their previous online behaviours on future search results. The collection of search history data is achieved through programs called cookies that are deposited on a user’s computer to log and report back, using the IP address as an identifier, on information such as previous search terms and links they have clicked. Users who have signed into a Google account, such as Gmail or YouTube, provide the algorithm with further data on personal and online behaviours that contribute into an even richer profile (Google 2012). While the concrete ways in which a user’s profile shapes his or her search results have not been made public by Google, it is clear this data has the potential to provide the company with even greater scope to pre-empt user intention.

It has been noted that users are largely unaware of Google’s personalisation algorithm and its bias towards the familiar or predictable (Pariser 2011). By way of explanation Goldman (2005–2006) argues that users are unwilling to consider the existence of a bias because they believe ‘objective’

machines, not 'subjective' humans, make crucial filtering judgments. In other words, human-edited media is seen as biased, while machine edited data is not. Beyond this trust in machine objectivity, the successful implementation of personalisation can be attributed to Google's decision to make the collection of personal data an opt-out rather than opt-in process. Google has relied heavily on the likelihood that users will ignore the default settings that allow the organisation to collect a considerable amount of personal information. It is an approach that has worked remarkably well. A number of studies indicate many users are blinded by trust in Google, with Granka, Joachims & Gay (2004) and Guan and Cutrell (2007) both revealing that most users only click the top two search results and that click-through results decline considerably beyond these initial results. Perhaps an even greater expression of trust in Google is the habit of the majority of its users not to seek a second opinion by using another search engine despite alternatives being readily accessible (Diaz 2008).

The PageRank and personalisation algorithms are both responsible for the ability of Google search to learn, in either a collective or individual sense, and adapt to the user. However, the application of a 'voting' system and consideration of previous online behaviours to shape future search tasks results in a series of largely hidden consequences for art directors and copywriters who use the adaptive search engine as part of their creative process. An examination of the search engine with regard to the qualities that enable it to be understood as an intelligent agent establish the extent of its influence.

2.3.3 Identifying Google's intelligent agency

Google search possesses intelligent agent capabilities both in terms of its key algorithmic processes and its relationship with users in a metaphorical sense. The concept of an autonomous search engine that trawls the web on behalf of its user was often highlighted as a future intelligent agent form by researchers (Magedanz, Rothermel & Krause 1996; Negroponte 1997; Middleton 2002). In many ways Google has fulfilled that promise albeit without the label and perhaps the stigma associated with less successful intelligent agent predecessors. Rather than Google search being an intelligent agent with a

standalone interface that is referred to as a visible 'agent' or 'assistant', characteristics commonly associated with intelligent agents have been incorporated into the design of Google's search function. In other words, rather than being just one intelligent agent, Google search constitutes a system that includes various forms of this technology, a system that collectively reflects the traits of 'autonomy', 'the ability to learn' and 'cooperation' (Nwana 1996, p. 6).

Google primarily acts as an autonomous filter that indexes online information in response to often vague or incomplete search queries, a filtering process takes place without direct manipulation by the user beyond the entering of a search query. Prior to the introduction of PageRank, decisions regarding the relevancy of online content were largely left to the individual web user, who would 'browse' Internet content, moving from link to link and thereby self-selecting relevant web pages; however contemporary search engines play an influential role in the autonomous analysis of relevancy based on the 'popularity' of web pages and a user's profile. In addition to approximating the user's intention through the presentation of search results, Google attempts to predict each search query with its Google Instant feature. A keyword typed into the search query field is automatically completed to reveal a series of search query options, a process that may reveal alternative contexts that may not have been considered by the user. The goal of pre-empting the information gathering needs of the user is further evoked in the presentation of 'Searches related to ...' lists that are capable of directing the user to the most popular search terms that relate to a particular search query.

The effects of this form of autonomy, one based on the application of implicit feedback, are wide-ranging and complex. Intelligent agents have commonly been conceptualised as tools that autonomously fulfil those tasks the user would prefer not to do (Negroponte 1997; Haag & Cummings 2013); reviewing millions of pages of online content is obviously one of these tasks, but increasingly Google search could be described as fulfilling the role of a delegated memory. For many web users Google is called upon to recover information they have previously absorbed but which is not in their working

memory.⁵ This use of technology has arisen largely because of the speed with which Google processes information. However, this raises the question of whether creatives believe the act of recall is something better suited to search engines. And if search engines are used in this fashion, are creatives cognisant of any hidden losses emerging from this form of delegation? These points will be explored later in the thesis with regard to emerging forms of software–human collaboration and its influence on an undertaking that has not traditionally been ‘outsourced’: the act of making new associations.

In order to develop new ideas, advertising creatives are required to construct novel associations between concepts. This process, according to Sawyer, is the result of a combination of conscious and unconscious cognition (2012, p. 104). While the development of new associations may not necessarily be a task practitioners want to delegate, it is an action that is capable of being automated by Google. One of the aims of the search engine is to pre-empt the user’s needs and this involves making connections before a search query is complete. A 2010 Google blog post describes the benefits of Google Instant as follows: ‘Typing [c] will give you predictions for [chicken] or [cake] versus [craigslist] or [cnn], and typing [co] will predict [cookies] or [coconut] – and maybe inspire you to make coconut cookies’ (Google 2011, para. 3). This example suggests a desire to develop associations on behalf of the user insofar as Google search acts as a technological subconscious that completes the user’s thought, based on a personalised knowledge developed by the search engine’s database and algorithms. However, the example also demonstrates that the search engine presents suggestions to the user in a way that is analogous to how ideas are associated with a word or concept in the ideation process. This occurs because the completed form of the query might not directly match what the user is consciously thinking, or it may complete an idea that is on the tip of the tongue, or in this case, on the tip of the fingers. I use the term ‘technological subconscious’ to suggest a parallel with human cognition, the process of developing associations based on a vast repository of stored memory that occurs below the individual’s awareness. As occurs with human cognition, only the formed association presented by

⁵ Cognitive psychologists have developed the term working memory to describe the ability of the mind to ‘maintain information in an active and readily accessible state, while concurrently and selectively processing new information’ (Conway et al. 2006, p. 3). As such, the working memory has a limited capacity with regard to the amount of information that can be held at any one time.

Google is perceptible. For example, typing the word ‘orange’ into the search engine when working on a new advertisement for an orange-handled power tool may result in the immediate presentation or auto-completion of a particular idea that was not sought, for example the television series *Orange is the New Black* being brought into the conscious thought processes of the art director or copywriter (Figure 2.2). This could set off further associations that result in a creative concept, such as female inmates using power tools to break out of prison. It is setting up a connection that is unlikely to have occurred without the use of an adaptive search engine. The concept of a technological subconscious extends beyond the automated completion of search terms and into the search results themselves when incomplete thoughts or vague search terms are entered into the query box. The search term ‘photocopier fail’, for instance, may result in a video of a man photocopying this backside, captured by a security camera, being presented to the user and thus an association is developed based on decisions made by the search engine and initially below the surface of the user’s awareness (Figure 2.3). Of course, each example presented here might be one of thousands of associations that would run through the mind of a creative as they attempt to develop a new idea, but what is distinctive about the involvement of Google’s technological subconscious is the adaptive mirroring of human and machine cognition. As a result, the question of whether the searcher or Google developed a new association becomes impossible to determine. The important point here is that the search engine both mimics the associative process of the creative and complements their ideation in a way that other mediums do not. The concept of a technological subconscious suggests a much closer cognitive relationship with software, which will be further explored in later chapters.

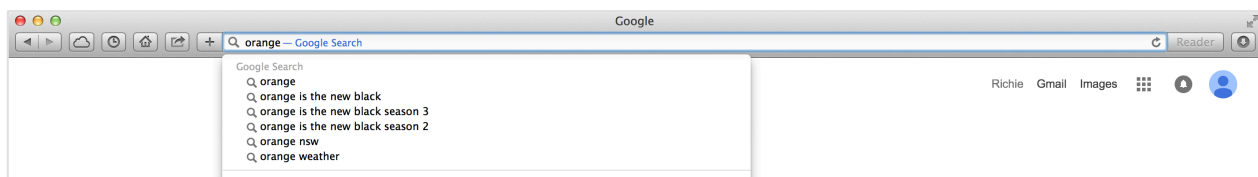


Figure 2.2: A screen capture of the Google Instant function (Google 2015a)

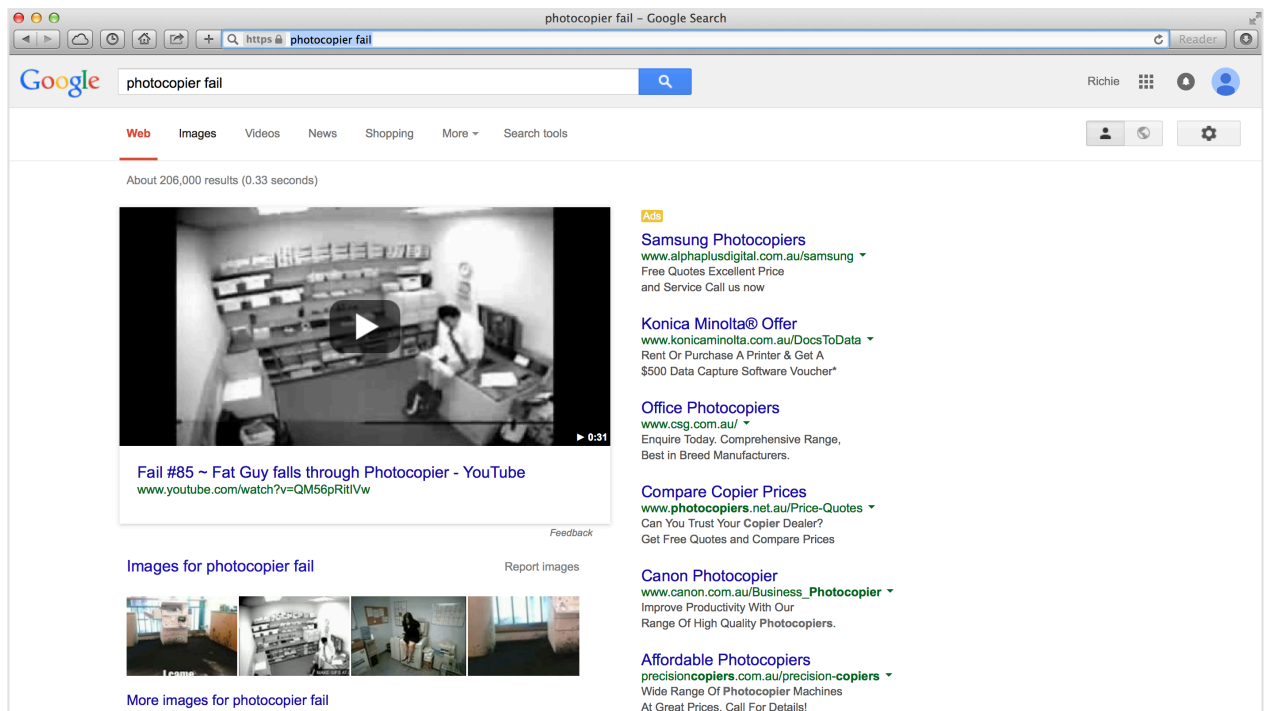


Figure 2.3: A screen capture of Google's top search result for 'photocopier fail' (Google 2015b)

The second of Nwana's intelligent agent characteristics is the ability to learn. Google search learns by recording the search history and other online activities of its users. Based on this information the search engine's personalisation algorithm is capable of analysing its user's online activities to make filtering judgments. At its current stage of development many of these judgments revolve around geographic location based on the user's IP address. While location is a noticeable determining factor for many search results, the role of search history and other online behaviours is less obvious. As the exact nature of this algorithm has not been made public it is difficult to understand how personalisation works or how successful it has been with regard to filtering content to individual users. However, it can be speculated that the more Google learns about the behaviours of search users, the more effective it will become in delivering highly personalised search results.

Google's personalisation algorithm has attracted criticism in scholarly and technology non-fiction writing domains due to the way it shapes the communicative relationship between the search engine and the user. Siva Vaidhyanathan argues that the delivery of results based on a profile erodes the serendipity – the chance encounters and helpful mistakes – that often evokes knowledge and

creativity (2011). Technology writer Eli Pariser suggests personalisation places web users in a 'filter bubble' in which search engines provide information that reinforces the status quo:

Personalisation is about building an environment that consists entirely of the adjacent unknown – the sports trivia or political punctuation marks that don't really shake our schemata but feel like new information. The personalised environment is very good at answering the questions we have but not at suggesting questions or problems that are out of our sight altogether. (2011, p. 91)

For Pariser, adaptive search engines trap the user in a relationship with technology that results in exposure to online content that feels new but is not. This approach to computing could be thought of as a best friend who knows you so well they are capable of finishing your sentences as you speak. But in face-to-face communication, having someone finish your sentences, on the basis of previous exchanges and static expectations, can subtly direct and thereby narrow the parameters of a conversation.

Nwana's third intelligent agent characteristic, cooperation, is exhibited in a number of ways. On an explicit level Google cooperates by responding to users' search queries, however the parameters that surround this operation are largely invisible to the user due to the lack of transparency with regard to the operation of the search engine's algorithms. The trait of cooperation is also reflected in Google search's ability to work across other environments to which it has access, such as Gmail, YouTube and Google+, to develop a richer profile of its users with which to customise search results. Rather than being considered a cause for concern by web users, the invisibility of these collaborative processes has emerged as a strength of Google search, as too much direct manipulation by the user, such as the requirement to indicate preferences, adds a layer of complexity that most searchers would prefer to avoid. This shallow understanding of web search processes may have a minor impact on the web user for personal online tasks but is problematic when the web is used for research processes which demand exposure to ideas outside what is widely accepted and predictable, as is the case with creative practice.

The senior management of Google has expressed a desire for its main product to function as an intelligent agent, according to John Battelle:

In short, the search engine of the future isn't really a search engine as we know it. It's more like an intelligent agent – or as Larry Page told me, a reference librarian with complete mastery of the entire corpus of human knowledge. (2005, p. 525)

This relationship is evoked in the idea that users expect search engines to read their minds, an attribute that Google is becoming increasingly adept at achieving. This has occurred for good reason. Search engines that disappoint are avoided (Goldman 2005–2006) and in terms of speed and relevancy Google is held in high regard, as evidenced in the decision of a large number of searchers to both use the software and rely on the first few search terms it provides. But rather than reading minds, Google search pre-empts on the basis of its analysis of web content popularity and therefore presents search results with a generic quality. Hillis, Petit and Jarrett describe this characteristic as 'generic individualisation'.

While search results may be ranked or selected on personalization algorithms, they nevertheless reflect only a prediction of the actions a user may take as they are generated solely on the basis of aggregating pre-stated preferences. In effect, Google offers searchers ideas of what to search for based on individual preferences that reference only a generic 'vision' of themselves. (2013, p. 67)

The generic nature of these personalised results is likely to present the familiar rather than unknown to the searcher, a condition that could emerge as a point of frustration for creative practitioners looking for diverse sources of information. They could use another search engine, however the continued dominance of Google in the field of search suggests this is an unusual occurrence. The question of whether a paradox exists in which practitioners are frustrated by limited exposure to unusual or diverse sources of information yet continue to use the search engine is explored empirically in Chapter Six.⁶

Other limitations of Google's ability to 'read minds' have been noted. Battelle (2005) argues that Google functions as a database of intentions, a map of users' individual and collective preferences and habits that is used to approximate future search results. However, the pre-emption of the individual user's intent is often not achieved. An example is the search engine's inability to determine the contextual difference between information recovery and discovery: 'Recovery is everywhere you've

⁶ A search engine that accommodates unpredictable outcomes in 'creative search' has been proposed by Hugill et al. (2013) but not yet released to the market.

been before (and might want to go again); discovery is everything you may wish to find, but have yet to encounter' (Battelle 2005, p. 262). While there is not necessarily a clear delineation, search engines are predominantly used to gain exposure to either the known or the unknown. An advertising art director may, for example, turn to Google search to find a particular US advertising campaign that she has previously been exposed to but cannot remember. Accordingly, she would enter the term 'Ikea cat video', an act of information recovery that is instantaneously shaped by the search engine's personalisation algorithm that reviews the search history, online activities and other collected attributes of the web user. A discovery search scenario might see another art director looking for information on 'male BBQ traditions' for a beer commercial; in response, the personalisation algorithm will once again shape the search results. In the second scenario, the possibility exists that rather than reading the user's search term as a quest for discovery it will instead use the searcher's previous online behaviours, to assume a request for recovery. In the first scenario exposure to the unusual or unfamiliar is not required; in the second scenario a form of divergence from the searcher's previous searches and activities may be beneficial to the process of inspiring a new idea. In Google search's current stage of development, little emphasis appears to be placed on distinguishing between information discovery and recovery. This outcome is not necessarily a hindrance for many everyday search tasks but one that subtly influences the research actions of creative practitioners. As will be discussed in detail in later chapters, there appears to be a blurring of information recovery and discovery as a result of the goal of search engines to tailor search results to a user's previous experiences and therefore privilege web content that reflects what the user already knows rather than information that is yet to be discovered.

In summary, the present consideration of the nature of search engines and the technological innovations of Google's PageRank and personalisation algorithms reveals the emergence of an incipient intelligent agent or a 'semi-intelligent system' (Vaidhyanathan 2011). With regard to the creative practice of advertising art directors and copywriters, there can be little doubt that the algorithms that are responsible for Google search's intelligence offer fast and convenient access to online information, but this 'behind the scenes' form of intelligent agency is capable of prioritising

familiar over surprising or unusual online content. But this is just one consequence. Google search is capable of doing more than shaping exposure to online content and thus 'providing pre-structured access to information for living' (Jensen 2012, p. 194); it is also in a position to shape the social context in which it and its users operate.

2.4 The social context of intelligent agents

The social context of intelligent agent use has received little attention from ICT scholars,⁷ who tend to focus on the functional implications of this approach to computing. While there are some exceptions,⁸ intelligent agents have similarly attracted limited interest from social scientists, quite possibly because they are often integrated in existing software platforms. Network society theory provides a lens through which to study the social context of intelligent agents by identifying the transformations that have occurred as a result of the movement from industrial capitalism to informational capitalism. This grand narrative approach, most commonly associated with Manuel Castells (1996; 2000), is generally employed by researchers to holistically consider the economic, political and social effects of mass networking of ICTs rather than the influence of individual technologies on a social grouping. It is during the network society period that intelligent agents have achieved widespread use by both responding to information proliferation and exacerbating its effects. Conditions associated with the network society period that are relevant to the study of intelligent agent influence on advertising

⁷ The social implications of intelligent agents are rarely considered by ICT researchers, however there are exceptions. Serenko, Ruhi and Cocosila (2007) have discussed a series of 'unplanned effects' of the use of intelligent agents including trust affliction, skills erosion, privacy attribution and social detachment. Using a social informatics framework, the authors offer IT developers a series of consequences painted in broad-brush strokes, using examples across a range of intelligent agent types. While there is little elaboration of each of these effects, the authors note that, 'intelligent agents may make people passive spectators rather than active participants in activities that are now managed by their agents' (2006, p. 158).

⁸ Lanier raised concerns about the concept towards the end of the 20th century, stating that intelligent agents represent a new form of computer use, one in which the user cedes their authority and is taken along particular pathways: 'An agent's model of what you are interested in will be a cartoon model and you will see a cartoon version of the world through the agent's eyes. It is therefore a self-reinforcing model. This will recreate the lowest-common denominator approach to content that plagues TV'. He goes on to state: 'The agent question is important because it is part of a bigger question: do people keep an open mind about what they are, or might be capable of becoming? Or do people limit themselves according to some supposedly objective measure, perhaps provided by science or technology?' (1995, pp. 76-81). Wise (1998) has used actor network theory to examine intelligent agents in a broad sense. Conceptualising intelligent agents as digital butlers, he predicts the following consequence: 'If an agent is said to be intelligent (or expert) we tend to defer more towards that program. We tend also to limit ourselves only to the categories and procedures that the program offers. Thus the proliferation of intelligent agents and expert systems may actually increase normativity and obedience to technocrats and system builders rather than freeing the individual from their control' (1998, p. 419).

creatives are the self-perpetuating cycle of technological innovation, a network logic that obscures complexity of information from the user, and the privileging of the values of efficiency and speed in organisational environments. These conditions are introduced in this section and will be revisited in later chapters when analysing and interpreting the qualitative research findings on the everyday work actions of advertising art directors and copywriters.

2.4.1 Rise of the network society

Intelligent agents are a response to the rapid increase of digital communication that has occurred during society's movement from industrial capitalism to informational capitalism. Castells has identified this socioeconomic shift as being indicative of a network society period in which priority is given to the flow of information through the networked ICTs that connect people, institutions and countries (1996). He does not claim that the organisation of people around informational networks is new; what is distinctive about the current transformation is its pervasiveness, with all human domains increasingly being organised around ICT-mediated networks. To accommodate what he sees as a convergence of social structure and information technology, Castells states that 'interactive computer networks are growing exponentially, creating new forms and channels of communication, shaping life and being shaped by life at the same time' (1996, p. 2). For Castells, information has become the distinguishing feature of a globalised world that both integrates people, processes and fragments and disintegrates existing social conditions (Webster 2006).

Castells argues that information⁹ has become the 'raw material' of economic activity in the post-industrial period. It is both the input and output of technologies that 'enhance and accelerate the production of knowledge and information, in a self-expanding, virtuous circle' (2000, p. 10). Rather than existing as static entities, software that facilitates the flow of networked communication is part of a 'feedback loop' between developers and users that accommodates fast-paced innovation.

⁹ Rather than seeking to develop his own definitions to explain the difference between information and knowledge, Castells suggests definitions he believes require no improvement. For information, Marc Porat's technologically rather than semantically inclined definition is presented: 'Information is data that have been organised and communicated' (Porat cited in Castells 1996, p. 17). And for knowledge, Daniel Bell's understanding of the term is suggested: 'Knowledge: a set of organised statements of facts or ideas, presenting a reasoned judgement or an experimental result, which is transmitted to others through some communication medium in some systematic form' (Bell cited in Castells 1996, p. 17).

The feedback loop between introducing new technology, using it, and developing it into new realms becomes much faster under the new paradigm. As a result, diffusion of technology endlessly amplifies the power of technology, as it becomes appropriated and redefined by its users. New information technologies are not simply tools to be applied, but processes to be developed. Users and doers may become the same. (Castells 1996, p. 32)

The feedback loop described by Castells neatly conceptualises the continual innovation of ICTs that are capable of both processing and producing ever increasing quantities of information. For instance, many software systems, including adaptive search engines, have been developed to alleviate the 'information overload'. Yet by relieving the user of filtering tasks, search engines free up time that can be spent by the user to find new applications for this or other forms of software, processes that in turn are capable of being automated as a result of software innovation.

Rather than taking a purely technological, determinist approach to the effects of the networked ICTs on a grand scale, Castells argues that during the network society period, social contexts are shaped by a complex interplay of innovation, enterprise and social applications. Castells writes, 'Technology is society, and society cannot be understood or represented without its technological tools' (1996, p. 3); this is a perspective that departs from the technological determinism that often informs social theory regarding new media (Webster 2006). A similar view is offered by Pierre Levy, who claims society is conditioned rather than determined by its technologies: 'To say technology conditions is to imply that it provides access to certain possibilities, that certain cultural and social options couldn't be contemplated without its presence' (2001, p. 7). This presence is of course reliant on the user choosing to apply a particular object. As Raymond Williams (1981) points out, technological devices do not independently alter society; it is the use of these devices that evokes change. But that is not to say that the user always acknowledges or recognises their application of a particular technology or their contribution to its social effects.

2.4.2 The hiding of complexity

While there is little agreement on the exact nature of the network society period (Webster 2006), it is clear that ICT networking on a global and self-perpetuating scale has the capacity to impose a distinct logic onto social and organisational processes (Flew 2014). Castells claims the logic of an ICT network

is 'more powerful than the powers within the network' (1996, p. 193), a paradigm that allows the network to adapt to the increasingly complex interactions and patterns of its collective users. It is a quality that while inclusive of ICT users is often hidden to obscure the complex nature of networked communication. Jensen (2012) states that the information that flows between users and ICTs is more complex and composite than communication in the previous media age. He identifies this as an outcome of the merging of interpersonal, mass media and networked communication that results in three flows of communication: information flows which integrate one-to-one, one-to-many and many-to-many communication into a diverse series of interactions; user flows that allow communication across all available and accessible media forms; and context flows that enable a mobility of context in which the user, the technology and information come together (pp. 186–187). The interlinked communicative practices that arise from these flows of communication is both caused and alleviated by new media technologies. For instance, Google Now in its role as an intelligent agent for mobile ICT devices works across all three flows of communication. The application acts as a conduit to, for example, email messages (one-to-one communication), weather forecasts (one-to-many communication) and social media updates (many-to-many communication). This convergence is deemed to offer the receiver the benefit of 'just the right information at just the right time' (Google 2013, para. 2), an on-going act of pre-emption that is achieved by negotiating a set of complex online environments.

An understanding of the concept of meta-communication, or communication about communication, provides a means of understanding various layers of often obscured information flows. Jensen (2012, pp. 195–196) describes meta-communication as any communicative practice in which digital media is applied to reconfigure forms, content and functions of communication. Using the search engine to illustrate the concept, Jensen claims that for this technology to produce the most relevant and personalised response to a query, most meta-communication occurs below the communicator's awareness.¹⁰ When a search engine is used, the communicator has his or her

¹⁰ This occurs as a result of the processing of metadata, the units of contextual meaning applied by the search engine.

preferences recorded as part of a profile that collectively shapes information that flows through the network. In effect, the 'meta' is derived from this flow of information. As Jensen puts it, 'on the web, we cannot not meta-communicate' (2012), as every action is capable of being applied to future tasks. This echoes Castell's observation that in the network society, 'Users and doers may become the same' (1996, p. 32). This form of communication is implicit; its existence can only be inferred through the context of the search results. In this instance, meta-communication occurs to hide the complexity of the network; the search engine user only sees the end result rather than the layers of communication that occur below the surface. That is not to say that the search engines always get it right. As mentioned previously, there are contextual winners and contextual losers, for instance those search engine users who find that the act of information discovery is replaced by information recovery as a result of exposure to the familiar, or those who have the context of their Google image search misconstrued. However, it appears that the speed and efficiency of contemporary search engines allay these concerns.

Meta-communication, as applied by Google search, underpins the 'knowledge' or collective intelligence of digital networks. Levy describes collective intelligence as:

the enhancement, optimal use, and fusion of skill, imagination, and intellectual energy, regardless of their qualitative diversity. This ideal of collective intelligence ... involves the sharing of memory, imagination and experience through the widespread exchange of knowledge, new forms of flexible organisation and coordination in real time. (2001, p. 147)

For instance, Google search employs collective intelligence when processing information based on the popularity of content as indicated by users' aggregate behaviours through its PageRank and personalisation algorithms. This application of collective intelligence suggests the emergence of a network logic in which the popular is prioritised over the unusual, the collective over the particular. These conditions have led Vaidhyanathan to express concern about the ability of Google's algorithmic structures to shield the user from 'radical encounters' by limiting their access to information they are already aware of (2011, p. 182). Indeed, Levy has described the concept of collective intelligence as both a 'poison and a cure' (2001, p. 11). A problem with building and harnessing collective intelligence is that in hiding the complexity of the network the 'organic roots of information are shaken off' and

instead users are exposed to 'culture at a distance' (Lash 2002, p. 20). The user's identification of the relationship between texts is diminished, as is exposure to entropic and complex information that can trigger the creative process action of developing new associations. Further exploration of how this network logic challenges knowledge work fields such as creative advertising will be explored with regard to empirical data in later chapters.

2.4.3 A new informational order

Castells (1996) states that the network society is characterised by the erosion of rhythmicity associated with the lifecycle. The corporate mantra of 'flexibility' is a key driver of the new informational order that is shaping all domains but is particularly pronounced in knowledge work fields. Castells explains that as a result of the mass networking of ICTs, processes, organisations and institutions are reversible and adaptable; these emergent characteristics have, for example, accommodated the convergence of public and private spheres (1996). As Manovich (2001) points out, the Internet browser is applied for both work and leisure in networked communication. Accordingly, knowledge workers are able to use networked ICTs for pleasurable pursuits at work but are also given the capacity to work more outside the workplace due to the application of the same technology. This has repercussions in terms of a reduction in periods of personal time, yet less obviously suggests new relationships with technologies and the emergence of socially determined expectations surrounding their use.

The blurring of the boundary between the private and the personal is just one outcome of the flexibility offered by the networked ICTs that accommodate intelligent agents. By bringing structure to a global mass of information, networked ICTs are capable of transferring a particular network logic onto tasks undertaken by their users. This is a quality touched on by Castells, who warns that too much structure can negatively affect the creative power of network interaction 'since the unstructured is the driving force of innovation in human activity' (Castells 1996, p. 62). However, it is not the ICT itself that imposes this structure but the social values of organisations programming the technology. Hassan (2008) describes the transition from industrial to informational capitalism as a triumph of

neoliberalism, one that has seen the quest for efficiency and speed espoused by global ICT organisations like Apple, Google and Microsoft transferred onto the social life of network users. Businesses are expected to take on the characteristics of the network, that is, to be fast, flexible and adaptive, values that are capable of being transferred to those working within the enterprise. The valorisation of efficiency through the increased use of and delegation to ICTs indicates the emergence of a new form of Taylorism. Where Taylorism in its 20th century form was designed to explicitly align the worker to the rhythms of the machine (Hassan 2008, p. 40), the focus on efficiency in information technologies effectively achieves the same outcome, albeit in an implicit and often bottom-up rather than top-down mode. Webster states that flatter organisational hierarchies have accommodated informational capitalism, with 'power shifting to the real movers and shakers, those information workers who operate on the networks' (2006, p. 103). It is not necessarily the manager or middle manager who requires a knowledge worker to use new forms of software but instead the logic of the network that encourages the use of new technologies. If Taylorism existed to achieve mass production, the adaptation of this ideology to ICT-facilitated knowledge work is capable of generating mass-produced, 'pre-programmed' knowledge in organisation contexts. If, as Hassan puts it, 'knowledge emerges through the open and experiential and diverse (and often intuitive) working and interpreting of raw data and information' (2008, p. 55), a Taylorist approach has significant consequences for advertising enterprises which seek to produce forms of communication in which creative production is emphasised. This is particularly relevant to the discussion of information technologies to which analytical tasks, such as filtering search engine results using data sets pertaining to both collective and individual Internet use, are delegated.

The concept of efficiency is interrelated with the concept of speed in the network society period, as 'getting a job done quickly' is often viewed as the litmus test of productivity. On this topic, Hassan (2008) reminds us that speed is built into the logic of computers, a logic that is reinforced culturally through the mass networking of ICTs. Castells sees time-space compression, a condition that has emerged over centuries, as intensifying existing social conditions during the information age as a result of the instantaneous nature of access to information gathered from around the globe.

Accelerated time–space compression reflects the ideals of software developers who see their products as liberating us from the ‘burden of having to wait’ (Simpson 1995, p. 23), but at what cost? Van Dijk characterises the network society period as encouraging a ‘culture of speed’ in which any time saved as a result of using networked technologies is immediately used to fulfil other ICT related tasks (2006, pp. 193–914). The outcome of ICT conditioned time–space compression is less time for reflection, with Lash stating there is simply no time to escape the new informational order. ‘To think is not just at the same time to do; to think is at the same time to communicate. In the technological culture, reflexivity becomes practice; it becomes communication’ (2002, p. 18). When this occurs in the extreme, human cognition becomes more computational than reflective. According to Simpson (1995), the new information order has seen the predominance of technological rationality, a ‘means–ends’ approach that is firmly supported by the application of intelligent agent technologies that ‘think’ on our behalf:

Technology, through its emphasis upon efficiency and control, effects a ‘domestication’ of time, a reduction of time to manipulable, dispensable units geared towards future goals. As technology’s functional paradigm assumes increasing authority for us, our understanding of the meaning of action is thereby distorted. (1996, p. 4)

In this context, ‘outputs’ rather than reflective action become the key drivers of action and in the case of advertising production, the values inherent in creative practice – for instance, reflection on cultural contexts – are challenged by the drive towards outputs. In a culture of expedient outputs, there is little room for mistakes or risk, conditions that software is engineered to avoid and mask from the user, but which are often useful ideation-related actions. Instead, the quickest route to a solution becomes the only pathway offered. Or as Taylorist doctrine would put it, the ‘one best way’ is implemented in practice.

The movement from slow to immediate communication can mean the loss of the time to deliberate on the information provided by networked ICTs and the affordances of the technologies through which it is delivered. As Levy points out, ‘Often before we begin to deliberate on the possible uses of a given technology, those uses are already being imposed on us’ (2001 p. 9). Deliberation is further diminished by users’ lack of understanding of how these complexity-hiding technologies function. Bell (2006) has claimed that new ICTs exist as ‘black boxes’ that are only identified by their

inputs and outputs; how they work is largely unknown. This conceptualisation requires updating for network society artefacts such as intelligent agents. As the intelligent agent fulfils tasks on behalf of the user, often with little direct manipulation from the user, his or her contributions to the network – their inputs – are also unknown to the user. This represents a new form of naturalisation. In this new relationship with technology the user is never initially positioned to consider the implications of this new technology. The integration of intelligent agent capabilities into existing software systems, as in the case of the personalisation functions of Google search, provides an example of technologies that do not necessarily announce themselves as being ‘new’ to the user before being naturalised into practice.

2.5 Conclusion

Intelligent agents constitute a large and diverse field, however the main features of autonomy, ability to learn and cooperation provide a means of identifying Google search as a form of intelligent agency that is being deployed in the creative process of art directors and copywriters. Google’s intelligent agency is the result of its observation of the user’s online behaviour and application of the collective intelligence of the Internet, functions that allow it to anticipate the searcher’s intention and shape its results accordingly. While some users may feel that Google ‘reads their minds’, others would pay little attention to its functioning, largely because these increasingly adaptive abilities have emerged and continue to expand without a noticeable change to the search engine’s sparse white home page. In a period in which information is the key mode of production, any major development is worthy of consideration; yet the social life of intelligent agents appears to go largely unnoticed. Network society theory provides a means of considering the increasingly complex relationship between computers and technology that has resulted from the mass networking of ICTs. The shape and consequences of the relationship between Google search and advertising creativity, an area of professional practice that relies heavily on access to online content, have been introduced. Key amongst these consequences is exposure to familiar research materials through the use of adaptive search engines and the imposition of a new form of structure, one that prioritises speed and efficiency within work processes that require unstructured periods of reflection. From this point we can now move into exploration of the

industry context in which art directors and copywriters work, to further build the foundation for analysis of practitioner perceptions of the creative process and new media use.

Chapter Three

CREATIVITY IN AN ADVERTISING CONTEXT

3.1 Introduction

Creativity is commonly described as the mission of the entire advertising industry (Ewing, Napoli & West 2001; Koslow, Sasser & Riordan 2003) and identified as the main reason clients select the services of an advertising agency (Henke 1995; Hogg & Scoggins 2001; Johar, Holbrook & Stern 2001; Goldenberg & Mazursky 2007). The clients of advertising agencies are advised that the novel or surprising elements inherent in a creative advertisement capture the attention of a target audience by rising above the noise of the contemporary media landscape. Yet while creative advertising is a much-discussed goal of the industry, in practice most advertising aims to imitate rather than to diverge from the expected. In order for this condition to be explored, a conceptualisation of 'creative advertising' is established through the analysis of entropy and redundancy in advertising communication. This analysis reinforces the efficacy of creative approaches at a time when audiences are increasingly self-selecting media content from fragmented media channels and commonly ignoring, deleting and blocking advertisements when consuming mass media. Creative messaging appears to be an appropriate response to the increasing challenges in attracting and holding the attention of media consumers, however the production of advertising that both diverges from the conventional and is appropriate to the task at hand is rarely an uncomplicated endeavour. In order to better understand why this is so, this chapter examines the advertising industry landscape and communicative relationships amongst those involved in the production of creative advertisements. This understanding of industry-specific conditions frames discussion of the affordances and nascent influences of intelligent agents presented in later chapters.

3.2 Conceptualising creative advertising

The term 'creative'¹¹ is used by a large and varied collection of organisations as a means of identifying high-value products and activities. Advertising agencies are particularly fond of the word, with these enterprises going so far as to describe people working in particular roles as 'creatives', generally art directors and copywriters, while the work produced for a client's consideration is referred to as 'the creative'. In addition, literature on creativity reveals the term is variously adopted to identify a product, process, person or environment (Mooney cited in Taylor 1988, p. 101). These dimensions are interrelated with a *creative product* being the outcome of a *creative process* within a *creative environment* that encourages the abilities of a *creative person*. While each facet exists to offer researchers or practitioners a context within which to understand creativity, there is general agreement amongst scholars that the term in its broadest sense describes the combination of components of novelty and appropriateness (Amabile 1982; Hennessy & Amabile 1988; Amabile 1996; Runco & Charles 1992). Pope's survey of standard definitions has revealed several variations on the 'novel and appropriate' nexus, including creativity as 'new and valuable', something that is 'original and appropriate', a form of novelty that people find significant, or a novel and adaptive solution to a particular problem (2005, p. 57). Divergence, when an advertisement differs from the norm, is also commonly characterised as a form of novelty (Ang & Low 2000; Ang, Lee & Leong 2007; Lehnert, Till & Ospina 2014). The component of appropriateness is approached in a number of ways including fitness for purpose or practicality (Runco & Charles 1992), a value (Weisberg 1993; Mumford 2003), an ability to adapt to task constraints (Sternberg & Lubart 1999), or relevance to a particular audience (Amabile 1996). As Pope (2005) points out, there is a degree of ambiguity or looseness involved in the elaboration of appropriateness, a response to its use across numerous contexts.

¹¹ Despite its current widespread use, the term 'creativity' has only recently come into existence. Creativity is derived from 'creation', a term largely associated with philosophical, theological and aesthetic concepts, as a means of describing early 20th century entrepreneurial responses to rapid social and technological change caused by expansionist politics (Pope 2005, pp.19-20). Despite its fervent embrace by modern Western economies, creativity's relationship with creation has survived, with the term continuing to describe artistic pursuits.

The conditions of novelty and appropriateness are often employed to describe creativity in the advertising industry. After conceding that advertising creativity is an elusive concept to pin down, Ewing, Napoli and West offer the following definition:

Perhaps it may be best described as the forming of a new association of words, images, meanings, or events to produce an original communication intended to modify buyer behavior in some way (2001, p. 161).

In this instance, novelty is described as being both a creative process and a creative product with particular affordances. Other descriptions of creative advertising focus solely on the effect of a creative product. Drewniany and Jewler write: 'Creative ads make a relevant connection between the brand and its target audience and present a selling idea in an unexpected way' (2008, p. 6). Rather than identifying originality as a key determinant of creativity, novelty is indicated by the phrase 'unexpected element', an approach that reflects an emphasis on the 'surprising' nature of creative advertising discussed by other researchers (Goldenberg & Mazursky 2007). Drewniany and Jewler's definition suggests the condition of appropriateness by stating that creative advertising must 'present a selling idea'. This understanding supports empirical research that indicates advertising copywriters often perceive creativity advertising as a two-step communicative process in which the clutter of competing media content and the audience's apathy towards marketing communication messages needs to be 'broken through' before a message can be communicated (Kover 1995, p. 599). According to West, Kover and Caruana, 'Only when the execution of the commercial "grabs" them, whether through pathos, an unexpected laugh, or a sudden "snap", do people pay attention to or think about advertising' (2008, p. 42). As this conceptualisation suggests, creative advertising needs to do more than just elicit attention; it must also be an outcome of a process that takes the audience's response into consideration. While the first definition discussed here focuses on process, and the second on effect, both indicate a focus on the response of the audience. This emphasis reveals a distinction between creative advertising and other forms of creativity including artistic creativity, which is more producer-focused.

Despite differing levels of importance being placed on the role of the audience, advertising creativity and artistic creativity both seek to diverge from convention to achieve a desired effect. The

2009 television commercial entitled *Eyebrows* developed for British confectionary manufacturer Cadbury offers an example of this. The advertisement features two formally dressed children sitting in a photographer's studio preparing to have their portrait taken. When the photographer leaves the children to answer a telephone call the advertisement's soundtrack begins, a cue for the children's eyebrows to start 'dancing'. This advertisement offers an unexpected element by disrupting an everyday or familiar scenario with a series of twists that diverge both from conventional advertising and from how the viewer expects the scenario to play out. According to the Cadbury, the advertisement was made to 'make people smile' (Leroux 2009, para. 4); in other words, it was made to entertain through the presentation of the unexpected rather than to directly communicate the benefits of product consumption. Unlike a conventional advertisement, *Eyebrows* does not directly offer a selling idea: the children are not seen consuming or discussing the product, the product itself is not visible, viewers are not told why they should purchase this product. Instead the advertisement achieves its purpose by evoking a positive emotional connection with the brand to accommodate the behavioural effect of product purchase. The approach exemplified by *Eyebrows* is celebrated by the advertising industry and espoused as best practice, yet paradoxically it is less common in practice than conventional approaches, largely due to the challenges inherent in its production, which are discussed later in this chapter.



Figure 3.1: Cadbury's *Eyebrows* television advertisement (Creative Review 2012)

3.2.1 Creative versus conventional advertising

The concepts of redundancy and entropy as conceptualised by the Shannon and Weaver communication model (1963) provide a means of exploring the distinct but interrelated nature of creative and conventional advertising. The model sees communication as a process that starts with a source that produces the message that is then transmitted as a signal through a communication channel to a receiver, who converts the signal back into a message, at the point of destination (McQuail 2005, p. 64) (Figure 3.2). While many derivatives of this process model have been developed and its linear causality has been widely criticised (Bowman & Targowski 1987; Fiske 1990; Schirato & Yell 2000), the model provides a starting point for considering the effects of message transmission in the context of advertising messages.

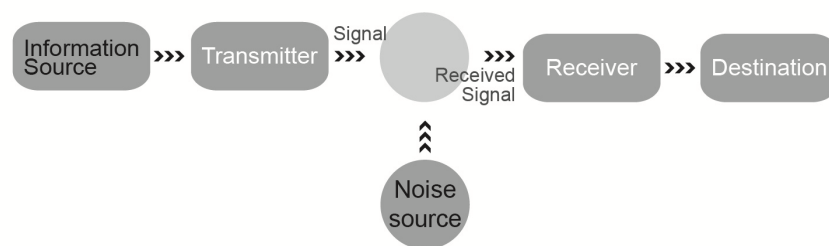


Figure 3.2: Shannon and Weaver's model of communication (Fiske 1990. p. 7, Figure 2)

According to Fiske's reading of the Shannon and Weaver model, redundancy describes the predictability or conventional aspects of a message; as such, it is the opposite of entropy, which is characterised by message unpredictability (1990, pp. 10–13). Rather than existing as absolutes, these entities can be conceptualised as sitting at either end of a spectrum when applied to advertising. At one end are messages containing high redundancy and low entropy, elements that characterise conventional advertising, while at the other extreme are messages containing low redundancy and high entropy, conditions of creative advertising (Figure 3.3).

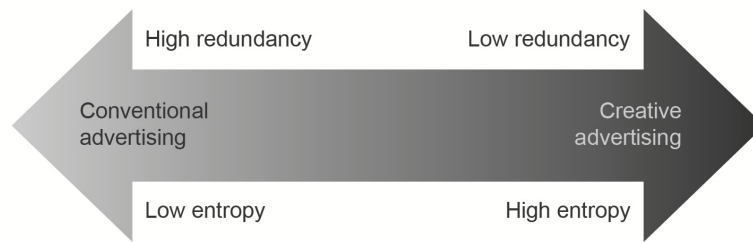


Figure 3.3: Spectrum of advertising creativity

High message redundancy has traditionally been an important component of advertising messaging as it offers a means of reinforcing a sales proposition in the minds of an audience. Using this approach, advertising agencies and their clients have sought to communicate familiar and repetitive messages to avoid challenging audiences with unpredictable or dense information. Redundancy is closely linked to convention, the notion that it is easier for a receiver to decode a message they have been exposed to before than a novel message that requires more interpretation to identify its meaning. To illustrate this point Fiske suggests: ‘A writer who breaks with convention does not want to be easily understood: writers who desire easy communication with their readers use appropriate convention’ (1990, p. 11). This sentiment has historically been accepted by the advertising industry, reflecting the concern that complicated messages, especially those aimed at mass media audiences, will cause the receiver to ‘tune out’ because they lack the motivation to decode an highly entropic message.

Redundancy is also employed as a means of overcoming interference affecting the transmission of the message from the sender to the receiver, a condition Shannon and Weaver describe as ‘noise’ (Fiske 1990, p. 8). Traditionally, high redundancy has been adopted to overcome the noise created by other messages. For example, an advertisement for laundry detergent would contain a high degree of message repetition and low entropy to avoid challenging its audience; it would avoid offering an unclear meaning to an audience that is being bombarded with messages, so its key message would revolve around a product benefit with which the audience is familiar, such as ‘tough on stains’. In addition, this message would be presented in a fashion that complies with the conventions of advertising for laundry detergents, such the vision of a pile of clean laundry that has been washed

using the advertiser's product sitting next to a pile of less pristine laundry that has been cleaned using another detergent. The repetition of a message like 'tough on stains', both within this advertisement and as a result of the frequency of the message placement, works on a largely unconscious level to evoke the desired behavioural outcome.¹² However, Fiske (1990) argues that not all advertising messages require high redundancy. He explains that clients with specialist products or services are in a position to include a greater degree of entropy in their communication as they can expect to have their audience's undivided attention.

The concepts of redundancy and entropy help to explain the industry's preference for creative advertising. The messages communicated in Cadbury's *Eyebrows* could be described as highly entropic due to the advertisement's communication of unexpected or unconventional elements, the most apparent of which is the image of the children's wildly dancing eyebrows. Playing with the expectations of an audience in this fashion leads to engagement, the effect of being entertained. However, to make sense to its audience this advertisement is overlaid with a series of redundant elements, one of which is the inclusion of the colour purple, a trademarked branding entity that alludes to both Cadbury packaging and its other advertising. Another is the structure or pattern of the advertisement itself, with *Eyebrows* borrowing from television comedy or music video narratives by establishing a scenario, in this case the banality of two children sitting at a photographer's studio waiting for their photograph to be taken, before revealing a surprise element that changes the meaning of the narrative. In effect, it is offering a pattern known to the audience through exposure to other media forms that contextualises the other elements of entropy or uncertainty.

In terms of its placement on a spectrum of advertising creativity, it could be argued that Cadbury's *Eyebrows* would sit close to the low redundancy, high entropy extreme. However, it is worth noting that not all clients are prepared to diverge from convention to this extent. The entropy contained in most creative advertising is less pronounced, with an unexpected element used

¹² The high redundancy model of advertising, particularly for mass marketed products, was standard practice until the industry experienced its so-called 'creative revolution' in the US in the 1960s and in Australia during the 1970s (Crawford 2008).

predominantly to attract attention to a message that is complemented by less challenging and repetitive elements. Consider the example of a work safety billboard featuring a life-like mannequin of a workman positioned as if it is precariously adjusting signage on the billboard structure itself (Figure 3.4). The ‘dangerous’ and unexpected presence of the life-like mannequin is designed to attract attention. However, the text featured on the signage being ‘positioned’ reinforces the nature of the message: ‘Would you do what you asked your workers to do?’ The inclusion of this simple, conventional message ultimately reduces the unpredictability that is initially presented, such that this workplace safety advertisement could be described as exhibiting less entropy and more redundancy than Cadbury’s *Eyebrows* but would still be characterised as an example of creative advertising. As Dahlén, Rosengren and Torn (2008, p. 396) point out, advertising creativity is much less a ‘yes/no variable’ than it is a sliding scale with positions dictated by a number of conditions that go beyond the ideation process of the copywriter and art director.



Figure 3.4: An outdoor advertisement for Worksafe (Advertolog n.d.)

An understanding of the shape and function of creative advertising provides a background to the investigation of online media use in the creative process. Importantly, it has been revealed that advertising creativity requires both entropic and redundant message elements to achieve its desired effect. In terms of advertising production, an understanding of these qualities allow us to question

whether new media technologies with intelligent agent capabilities applied in the creative process, such as Google search, increase the likelihood of collecting entropic elements or provide an ever-decreasing pool of unfamiliar sources of inspiration that can be used to construct advertising messages.

3.2.2 Benefits of creative advertising

Apart from its ability to attract attention and ideally snap a target audience out of their apathy towards advertising messages, a number of other factors help to explain the high value placed on creative advertising. These include the argument that creative advertising is a more effective means of meeting organisational goals than conventional approaches, the capacity of novel messaging to build participatory relationships with audiences in a convergent and fragmented media landscape, and the ability of advertising agencies to use their record of producing creative outcomes to attract new clients. An exploration of these factors explains why both clients and advertising agencies commonly perceive creative advertising to be a stronger approach than conventional advertising.

As Belch and Belch (2013) point out, a significant body of research has substantiated the efficacy of creative advertising. Studies have revealed the capacity of creative advertising to achieve short and long term brand recall (Sheinin, Varki & Ashley 2011), generate positive brand perceptions amongst audiences (Dahlén, Rosengren & Torn 2008) and achieve higher sales of products or services when compared to conventional approaches (Reinartz & Saffert 2013).¹³ The relationship between creativity and effectiveness is regularly discussed in industry contexts. For instance, a study by Donald Gunn (author of the influential *The Gunn Report*¹⁴) and the UK's Institute of Practitioners in Advertising states that from 1996 to 2012, advertisements that won creativity awards were seven times more effective in terms of achieving increased market share and return on investment than non award-winning advertisements. This trend appears set to intensify, with the study finding that creative

¹³ See Lehnert, Till and Ospina (2014) for a comprehensive review of the large body of scholarly research on the positive influence of creative advertising.

¹⁴ *The Gunn Report* is an annually published global index of award-winning advertisements.

advertising was twelve times more effective than conventional approaches between 2004–2012 (cited in *Campaign Brief* 2013).

The amount of money spent advertising on the mass media channels that have traditionally accommodated novel messaging has decreased in favour of online advertising (Allday 2014), however creative advertising remains a strong means of communicating to audiences in a convergent and fragmented media environment. The convergence of old and new media accommodated by the mass networking of ICTs and development of digital video recording technology has allowed audiences to easily block or avoid advertising messages that are ‘pushed’ at them. Yet audiences will simultaneously ‘pull’ information they deem to be desirable at a time of their choosing using new media technologies (Schultz cited in Kelly, Kerr & Drennan 2010, p. 18). This emerging trend further highlights the value of creative approaches. In the mass media age, creative advertising was viewed as a means of attracting attention or simply standing out to consumers. In the network society era, creative advertising has emerged as entertainment content in its own right that is sought out and shared by audiences. In many cases this branded content seeks to be a participatory form of media by inviting target audiences to contribute to a brand story developed by an organisation (Deuze 2005; Spurgeon 2008; Sheehan & Morrison 2009b; McStay 2010; Jenkins, Ford & Green 2013; Tenderich 2013). But rather than expecting that a brand can merely present its consumers with a ‘blank canvas’ with which to co-create a narrative, collaborative storytelling requires the development of an engaging primary narrative, a task for creative advertising practitioners. Tourism Queensland’s *Best Job in the World* campaign offers an example of collaborative storytelling in which audiences were asked to co-create a brand story by applying for a job as caretaker of a Great Barrier Reef island resort (Bhurji 2012). The campaign used traditional mass media channels in an unusual way by posting a job ad for an ‘island caretaker’ in newspaper classifieds around the world, a concept that generated a significant amount of publicity. Co-creation of a brand story was encouraged by asking the audience to post video job applications on new media channels. In this instance, a novel central idea encouraged audiences to seek out content about the brand to then contribute to a story that unfolded over several mass and new media channels. Sheehan and Morrison’s description of the application of storytelling by

restaurant chain Buffalo Wild Wings provides another example of this approach. The authors describe how a traditional medium – television advertising – can be used to establish a narrative that then moves online, where members of a target audience can then contribute to their own stories in the social media space (2009a).

The *Best Job in the World* and Buffalo Wild Wings examples highlight the importance of idea development for participatory storytelling within the agency environment rather than a focus on their execution (the final form of the advertisement), a point highlighted by Griffin (2008; 2009). However, the application of brand storytelling across media old and new also requires practitioners to be alert to novel ideas that are not generated within the agency or industry environment. Spurgeon's (2008) discussion of US confectionary brand Mentos' embrace of social media users' playful appropriation of its product speaks to this point. In early 2006, video footage of experiments revealing that the combination of Coke and Mentos could result in homemade soda fountains and rockets started to be shared on social media channels. Rather than expressing concern that its product was being used for something other than human consumption, Mentos sought to link itself to this form of collaborative storytelling by partnering with YouTube to conduct a competition for the best video (Spurgeon 2008, pp. 1–3). This campaign, which also successfully harnessed related opportunities for publicity, presents itself as an example of the possibilities that emerge when creatives look beyond traditional top-down approaches to advertising production.

The *Best Job in the World* campaign was the recipient of numerous advertising industry awards for creativity (Belch et al. 2014, p. 195), an outcome that is highly desirable to advertising enterprises. In response to a high level of competition within the industry, agencies frequently use their capacity to achieve creative outcomes as a means of promoting the value of their services (Allday 2014, p. 22). The point is reinforced by the advertising industry's fixation on awards for creativity. According to Moriarty et al. (2015), more than 240 international and 25 Australasian awards for creative advertising have emerged for a series of reasons:

The case in favour of awards is based on their perceived ability to (1) establish an agency's reputation as a creative force, (2) attract new business, (3) cement existing relationships with clients, (4) attract new creative talent, (5) raise employee morale, and (6) demonstrate that advertising adds value and sells. (2015, p. 27)

While awards for creative advertising are not necessarily a strong indicator of effectiveness with regard to achieving client objectives (Reis & Reis 2002), they do act as a means of quantifying creative outputs and in turn provide a means of attracting clients who select agencies based on their reputation for novel messaging. Henke's study of client–agency relationships offers a supporting view by concluding that creativity is 'by far the most important criterion' used by clients when choosing agencies (1995, p. 26). Creativity acts as a form of differentiation not just between advertising agencies but also for the industry itself. It is used as a means of reinforcing the value of specialist skills that an organisation's marketing department is unlikely to possess 'in-house'. In a similar vein, West, Kover and Caruana identify a common practitioner perspective that 'creativity is the only thing that distinguishes advertising from a salesperson's crude and often ineffective pitch' (2008, p. 35). While this is a harsh assessment of salespeople, it speaks to the perception that creative advertising requires particular skills and knowledge.

Creativity can be described as the lifeblood of advertising agencies. This is substantiated by research that supports the effectiveness of creative advertising, its emergence as a method of engaging audiences in a fragmented media environment, and the attractiveness of creative advertising agencies to clients. Yet despite this apparent endorsement of creativity in an industry context, any time spent consuming marketing communication messages across all media forms will reveal the dominance of more conventional approaches.

3.2.3 Barriers to creative advertising

There is no research that quantifies the amount of creative versus conventional advertising produced in Australia, however commentary in the advertising industry's literature and trade press support this view. For instance, practitioner Scott Morrison laments the number of 'shit ads out there' (2014, p. 48) in *Hacker, Maker, Teacher Thief: Advertising's Next Generation*, while internationally renowned Australian creative David Droga suggests that 'it is the 90 per cent of advertising that is formulaic and

shit that gives the industry a bad name' (cited in Baker 2014, para. 9). The disconnection between the industry's desire to develop creative advertising and the relative scarcity of creative advertising can be explained by an examination of literature on barriers to the production of novel forms of advertising. These include its high cost in comparison to conventional approaches, which require less time for the creative process and commonly lower costs allocated for production. The difficulty involved in measuring the influence of creative advertising on consumer behaviour, particularly with regard to sales outcomes, also emerges as a hurdle to its implementation.

Dahlén, Rosengren and Torn point out that creative advertising takes more 'effort' and 'knowledge' to achieve than conventional advertising, which consists largely of repetitious and familiar elements (2008, p. 393). More effort, which translates to the requirement for larger time allocations for staff who are skilled in the particular field of creative advertising, ultimately results in creative advertising being more expensive to produce. In addition, creative advertising is generally supported by high production values, including elements such as the use of highly experienced cinematographers or costly post-production techniques in the case of television commercials. Accordingly, the appetite of clients to commission creative advertising is shaped both by organisational marketing budgets and broader economic conditions, a relationship highlighted by Australian scholars who link periods of intense creative advertising production in Australia with robust economic activity (Crawford 2008; Spurgeon 2008).

While studies suggest that creativity is more effective than conventional approaches, the ability to measure the efficacy of an individual advertisement or campaign is a time-consuming and expensive task. Evans points out that a number of marketing variables, including the product, the price, the package, point of sale materials, public relations activity and distribution, all combine to determine the ultimate measure of success: sale of a product (cited in Goldenberg & Mazursky 2007, p. 289). Identifying whether an advertisement has increased product sales is further complicated by the often-delayed behavioural response of consumers to a creative advertisement. In addition, an engaging advertisement may foster existing brand loyalty. In contrast, conventional approaches that focus on sales propositions are more likely to result in measurable short-term sales increases. However this

approach likely to be less effective than creative advertising in building brand equity – the value that consumers associate with a brand's name rather than its material attributes.

A gravitation of clients towards conventional approaches is further encouraged by the contemporary media environment, which provides a large amount of data about consumers' online behaviour that in many cases can be directly associated with sales outcomes. This by-product of the mass networking of ICTs allows clients to quantify a return on investment for their advertising budget that is unachievable with mass media advertising. Both the increased use of online media by audiences and the measurability of their online behaviours by clients have seen an increase in funds spent in this environment. For instance, IBISWorld predicts that online advertising will account for 23 per cent of the industry outputs in the year 2019–20, an increase from an estimated 19 per cent in 2014–15 and 10 per cent in 2009–10 (Allday 2014, p. 14). Belch and Belch (2013) contend that a focus on digital communication lends itself to more rational approaches, such as hard sell or benefit-focused advertising, as opposed to emotionally engaging appeals. It is worth noting that in many instances digital advertising tactics require the audience to initiate communication. The purchasing of search engine advertising is an example of this action as the audience needs to enter a particular search term or display particular pre-determined behaviours before an advertisement is revealed – an informational approach that does not encourage long term brand recall and likeability.

The budget made available to an agency clearly emerges as a constraint in the production of creative advertising as it dictates production values and how much time can be spent on a task. While a means of 'pulling' audiences towards engaging or entertaining branded messaging, the online media environment presents itself as a barrier to the acceptance of creative advertising, as it provides readily accessible metrics on consumer behaviour that can have particular significance to clients wishing to make a direct link between the money spent on advertising and sales outcomes. The barriers discussed here reveal how clients can influence where an advertisement sits on the spectrum of advertising creativity, despite many selecting agencies based on their creative prowess. It is clear that creative advertising is a less common outcome than conventional approaches due to a large number of factors. In turn, this raises the question of whether emerging new media technologies used in the

creative process, such as the intelligent agents used to filter and coordinate online media, intensify or alleviate these conditions. This question will be taken up in Chapter Seven.

3.3 Advertising industry landscape

The following section reviews the industry context in which creative advertising is produced. It considers the types of advertising agencies operating in Australia, job roles within advertising enterprises, and the relationship between clients and advertising agencies. An understanding of industry characteristics provides a background for the analysis of the empirical data in Chapter Six, and for discussion of the influence of a widely used form of intelligent agency, Google search, on the social context of advertising production in Chapter Seven.

3.3.1 Advertising agency categories

The Australian advertising landscape includes enterprises ranging in size from large full-service subsidiaries of global advertising holding companies to small independent agencies that provide specialist or niche services, with the majority of enterprises operating at the extremes of this spectrum (Allday 2014). There is a high degree of foreign ownership of advertising services enterprises in Australia, an outcome of intensive merger and acquisition activity since the 1990s, with four holding companies – WPP Holdings, Publicis Communications, STW Communications Group and Omnicom Media Group Australia – accounting for an estimated 25.5 per cent of industry revenue in 2014–15 (Allday 2014, p. 20). Each of these companies owns a collection of advertising agencies, public relations consultancies, new media agencies and media purchasing agencies. Specialist agencies offer an alternative to full-service advertising enterprises through the provision of specialist knowledge or skills in areas such as creative advertising, digital media, youth markets or business-to-business communication.

Larger enterprises that describe themselves as full-service agencies dominate the Australian advertising sector.¹⁵ The term ‘full-service’ indicates the agency’s capacity to provide a range of services including the production of advertising content for print, broadcast and digital advertising, as well as consumer research and guidance on advertising strategy and media placement. From the mid to late 20th century, full-service agencies focused predominantly on what is described in the advertising industry as ‘above the line’ or broadcast and mass circulation print media advertising. The turn of the century saw the majority expand to also offer ‘below the line’ marketing communication services including digital, direct marketing, packaging, sales promotions and public relations activities. This resulted in the manifestation of ‘superagencies’ capable of fulfilling a larger number of clients’ promotional activities (Belch et al. 2014). Large full-service agencies place considerable value on the production of creative advertising and the attainment of awards for creative advertising. Yet despite this, they must also fulfil client requirements for conventional advertising in order to function as a ‘one stop shop’ (Allday 2014, p. 8).

As the name suggests, ‘creative boutiques’ are specialist enterprises that focus on the production of novel advertising; the reputation of an agency of this type is largely established by the number of awards for creativity won by it or its staff. Despite being smaller in size than the majority of full-service agencies, creative boutiques receive considerable attention in industry publications such as *AdNews* and *B&T*, a focus that further suggests the value placed on creativity by the industry. It is a common occurrence for art directors, copywriters and creative directors who have worked for larger agencies to establish creative boutiques. These staff members may be supported by account service teams but interact more directly with clients than creatives at larger full-service agencies. While many creative boutiques with small workforces are independently owned, it is becoming increasingly common for large international holding companies to purchase and maintain creative boutiques to expand their market share (Allday 2014, p. 22).

¹⁵ While the majority of firms in this category are large, multinational subsidiaries, a number of small to medium sized, Australian-owned advertising enterprises could be described as being full-service agencies.

Specialist digital agencies concentrate on the development of online content, an offering that has evolved from the production of web pages and banner ads to involvement of transmedia campaigns involving social media channels and mobile content. These agencies, which are often subcontracted by larger full-service agencies to provide specialist services, focus on their understanding of how digital media can be applied, rather than on the messages that flow through these channels. It has been noted that messages provided through digital media more often lack a high degree of sophistication unless they are part of a multi-platform campaign (Allday 2014, p. 7). As such, their approach to creativity focuses more on channel innovation; for instance, the development of an animated online banner advertisement that appears to 'shatter' a user's screen when a mouse is rolled over its page location.

Specialist advertising agencies commonly focus on audiences or industry sectors. Melbourne's Lifelounge Agency could be described as an audience-focused agency due to its concentration on the development of advertising and entertainment media content for youth audiences. Agencies that provide business-to-business (B2B) advertising services offer another example of an audience-specific focus, a specialisation that ultimately shapes their approach to advertising content. While agencies with predominantly younger markets focus more on creative advertising to attract the attention of audiences that consume a large amount of media content, B2B agencies are more likely to respond to the characteristics of conservative audiences by producing conventional advertising. Specialist agencies also produce advertising content for clients in discrete industry sectors, such as health care and technology. As with other forms of specialist advertising agencies, the key selling point for industry-focused agencies is the ability to connect clients to specialist knowledge that a full-service agency may not possess. As a means of countering this perceived attribute of specialist agencies, full-service enterprises often establish smaller specialist subsidiaries, such as the multinational agency Grey Group's establishment of Grey Healthcare Group Australia. As is the case with full-service agencies, industry-focused enterprises or subsidiaries produce both conventional and creative advertising.

3.3.2 Advertising agency roles

An understanding of the institutionally separated work processes and responsibilities of advertising agency employees provides a useful backdrop to the examination of advertising production. Moriarty et al. identify the functions of full-service agencies as account management, creative services, media planning and buying, and account planning (2015, p. 68). Following the American model, the staff directly responsible for the development of creative product in Australian advertising agencies can be categorised as being either 'suits' or 'creatives'; the term suits describes the account managers, media planners and account planners, while the term creative identifies art directors, copywriters and the creative director. According to Felton (2006), suits are charged with the role of determining what advertisement content should say, while creatives determine how the message should be communicated. This differentiation of roles is specific to the advertising industry; other marketing communication service providers are less rigid, with public relations practitioners, for example, fulfilling the strategic and creative elements of their campaigns. Differences in the way each group fulfils its role have also been identified. Where suits can be described as exhibiting structured and bureaucratic working processes, creatives are prone to undertake more relaxed working styles that accommodate spontaneity and autonomy (Hogg & Scoggins 2001).

Another key difference between the two roles is that advertising creatives are not typically in direct contact with an advertising agency's clients. It is the account manager's role to maintain client relationships as well as to develop and implement advertising strategy. Account managers are commonly supported by two other suit roles: account planners and media managers. In larger advertising agencies, account planners research consumer behaviour on behalf of the client, with social and ethnographic data used to make conclusions about audiences. This role may be outsourced by smaller agencies to an external strategist or undertaken by an account manager. In consultation with account managers and the client, media managers advise on and facilitate the distribution of advertising content via media channels. All of these roles have an influence on where an advertisement sits on the spectrum of advertising creativity, as the strategy developed in response to a client's

communication brief, research into consumer behaviour, and media selection all combine to form a series of parameters that dictate the outcome of the creative process of art directors and copywriters.

Australian Bureau of Statistics (ABS) figures based on the 2011 Census of Population and Housing suggest creative roles are highly specialised, with 670 people (2.2 per cent of advertising services employees) identifying themselves as being copywriters (ABS 2014).¹⁶ Creatives usually work collaboratively in teams of two, with the copywriter writing text for advertisements while the art director, usually a person with a background in graphic design, guides the visual elements of creative content. These roles are not always clearly differentiated, with copywriters often providing visual cues for advertising concepts and art directors contributing headlines or copy ideas. Considerable value is placed on the ability of an art director and copywriter to work collaboratively, and they are often brought into an agency as a team due to their history of working effectively with each other (Wells et al. 2008). Within an agency structure these creative teams are described as fitting into various levels – senior, mid-level and junior-level creative/art director teams – on the basis of experience and achievements. The creative director, a former art director or copywriter, is often responsible for shaping an agency's creative direction – the degree of novelty that is deemed appropriate for art directors and copywriters to exhibit in their development of creative content. In addition, the creative director is involved in the process of briefing art directors and copywriters and providing feedback on creative concepts prior to their presentation to the client.

The work processes of art directors and copywriters often begin with the presentation of a creative brief, a listing of the creative requirements dictated by an advertising strategy. Bergman and Blakeman offer this description of the creative brief:

A small internal document created by the account executive or the agency's account manager, the creative brief should dissect the product or service for the creative team. It should redefine the target audience, introduce the key consumer benefit, describe the individual features and consumer benefits, define objectives, address the competition, and outline tactics. (2009, p. 9)

¹⁶ An occupation category was not offered by the ABS for art directors working in advertising services, however the number of Australians working as graphic designers was calculated to be 1,819 or 6 per cent of the total workforce for the advertising services category (2014).

In addition to these parameters, a creative team is also given an indication of the budget for an advertising campaign, of the amount of time they can use to develop advertising concepts, and of the resources required to execute its final form. In response to a creative brief, the art director and copywriter team undertake a creative process that results in the provision of creative concepts. After reviewing these concepts with the art director, copywriter and often the creative director, the account manager presents the concepts to the client in the form of 'mocked up' storyboards for television commercials and digital media, layouts for press advertisements, and scripts for radio commercials. Although this journey of an advertisement from brief to presentation is common to advertising agencies, it must be mentioned that processes are often much more fluid to accommodate the creative process. For example, an art director and copywriter team may develop an idea for an advertisement or campaign that a client has not requested; the briefing process would then be retrospective if it occurs at all.

Beyond the influence of the strategic guidelines contained in the creative brief, and budget constraints, the manifestation of either creative or conventional advertising is shaped by how key actors within the agency perceive the effect of creativity on an audience. In their study of perceptions of advertising creativity, Koslow, Sasser and Riordan conclude that account managers evaluate creativity on the basis of its achievement of strategic outcomes,¹⁷ while art directors and copywriters consider an advertisement to be creative if it exhibits artistry (2003, p. 98). Kover and Goldberg (1995) claim that key difference in perceptions of creativity between account executives and creatives is the latter's focus on emotive messaging. Few art directors and copywriters would deny the importance of achieving commercial imperatives, yet it could be argued the majority believe advertising is effective if it possesses the ability to break through the 'clutter' of other media content to achieve the attention and engagement of an audience that is largely uninterested in conventional advertising (Kover 1995, p. 599). As account managers and creatives work collaboratively to produce advertising content, these

¹⁷ Hogg and Scoggins (2001) go so far as to say that account managers adopt a gatekeeper role in an advertising agency to ensure advertisements do not contain strategic inconsistencies.

differences in perception can result in tensions that shape the weighting of redundant and entropic elements within an advertisement.

3.3.3 The client–agency relationship

As previously mentioned, the client plays a central role in the determination of the degree of creativity in an advertising campaign or advertisement by determining the budget. However, beyond this condition, the social exchange between client and agency also has a role to play in shaping a final outcome. A consideration of literature on this topic suggests that different perceptions of creativity held by the client and agency staff have a significant influence on the extent to which an advertisement is creative or conventional in nature.

In their study of the British advertising industry, Hogg and Scoggins conclude that clients are inclined to evaluate creative products in terms of an ‘adherence to strategy rather than novelty’ and see creativity-focused work as a structured process (2001, p. 21). In his reflections on his time in the industry, former practitioner Michael Newman observes that the relationship between creatives and the client is often adversarial because clients are generally more comfortable with ideas they have seen before (2003). This argument is supported by a review of US ‘creative leaders’ in the advertising industry, who over a 30-year period consistently described ‘client fear’ or a lack of risk-taking as a ‘creativity killer’ (Ashley & Oliver 2010, p. 120). Koslow, Sasser and Riordan (2006) write that clients influence creativity in three main ways: the setting of strategic direction, evaluation of the creative product using techniques such as copy-testing, and resource allocation. Importantly, the authors state that the development of a ‘cost-based, commoditised relationship limits creative potential’ by calibrating a context that is not conducive to the production of creative advertising (2006, p. 99). Hogg and Scoggins (2001) conclude that art directors and copywriters often resent client intervention in the creative process and measure their creative experiences according to the level of autonomy they receive from the client. It is the negotiation of these differing perspectives on both novelty and appropriateness that make creative advertising a complex outcome to achieve in practice.

3.4 Conclusion

By exploring definitions of creative advertising and describing the context in which it is created, this chapter builds a foundation for an investigation of the impact of intelligent agents such as Google search on advertising creativity and its function within the advertising industry. Creative advertising seeks to gain the attention of audiences and rise above the clutter of the contemporary media landscape by transmitting marketing messages that include both entropic and redundant elements. While entropic components that evoke a surprising or unexpected effect for an audience are the focus of these messages, the inclusion of less prominent redundant elements encourages a message's meaning to be received as intended. Thus creative advertising contrasts with conventional advertising, which can be described as placing greater emphasis on familiar over surprising elements. There is considerable recognition of the effectiveness of creative advertising as a means of not just eliciting surprise in an audience but also entertaining them, thereby imbuing a brand with positive values. In addition, changes in the contemporary media landscape that allow audiences to exert greater control over media consumption have seen creative advertising emerge as a form of content that is actively sought out by audiences and shared within social networks on a peer-to-peer basis for its entertainment value. Creativity, a term that is widely associated with advertising yet not always achieved in practice, is increasingly presenting itself as a necessary component of all advertising, a shift that in turn requires attention to be placed on emerging technologies that are capable of supporting or limiting its manifestation.

Despite the difficulty involved in measuring the effectiveness of any form of advertising in terms of sales outcomes, there is industry-wide appreciation for creative advertising that is reflected in the high value placed on industry awards for creativity. This is particularly pronounced in smaller creative boutique agencies but is still in evidence at larger full-serviced advertising enterprises. Indeed, at agencies of all sizes creativity is often used as a means for advertising enterprises to promote their own services to prospective clients. Accordingly, it would appear that creativity fulfils a central, if not ubiquitous, role in the labour processes of advertising agencies. Yet despite the high value placed on creativity, the majority of advertisements produced in Australia could be described as fitting into the

conventional rather than creative category. It has been noted that creative advertising is more difficult to produce than conventional advertising and requires a longer timeframe to complete thereby increasing the cost of the client. An understanding of this particular constraint is useful with regard to the question of whether new media applications that in effect 'think' for themselves are capable of alleviating or intensifying the difficulties involved in the production of creative advertising.

Differing perceptions of creativity held by those involved in the production of advertising emerges as another reason why creative advertisements are more difficult to achieve than conventional outcomes. A review of literature indicates that while account managers and clients perceive creativity in terms of its response to a set of predetermined strategic conditions, art directors and copywriters consider an advertisement to be creative if it attracts attention by being unusual, exhibits artistic expression or presents an emotionally engaging message. However, as gatekeepers in the production process, clients ultimately determine whether creative advertising is produced. As Koslow, Sasser and Riordan put it, 'clients often receive the advertising they deserve' (2006, p. 99), a contention that suggests their ability to both encourage and limit the creative potential of their marketing communication. This complex environment forms part of the social context in which advertising is produced. Later chapters return to this context as it relates to how individuals understand and value the use of intelligent agent software in the production of creative advertising. Now that an understanding of the industry context of advertising creativity has been presented, the next chapter reviews the literature on the creative process within the context of advertising.

Chapter Four

THE CREATIVE PROCESS IN ADVERTISING

4.1 Introduction

This chapter examines the creative process of art directors and copywriters and the social context in which advertising is developed. A review of literature on this form of creative practice is necessary to understand how software with intelligent agent capabilities, such as adaptive search engines, are deployed to gather information used in the production of advertising material. The chapter begins by examining the stage-based models that characterise the creative process as a form of problem solving that revolves around individual cognitive factors. To provide a comprehensive analytical means of investigating the influence of emerging new media on advertising creativity, this chapter then discusses Mihaly Csikszentmihalyi's systems model of creativity. This model supplements the stage-based approach by identifying the relationships and interactions of the social systems that 'determine the occurrence of an idea, object or action' (1988, p. 329). While creativity is often considered an intuitive and internalised process, this chapter explores the influence of the broader culture in which art directors and copywriters operate. This is achieved through a consideration of cultural literacy, a knowledge of the cultural rules and symbols, that allow sense-making between creatives and their audiences. It is argued that in the network society era, practitioners predominantly use online media as a means of accessing and comprehending cultural values. The chapter then considers how aesthetics and techniques of postmodern advertising emphasise the act of consciously gathering research material from the domain, and the implications of this approach for the creative process in the digital age.

4.2 The creative process in advertising

In the context of advertising production, the phrase 'creative process' is employed to describe the actions taken predominantly by the art director and copywriter to develop a new advertisement in

response to a client brief. While not all advertising could be described as creative advertising, the term creative process is used to describe the production of all advertising, whether it leads to a novel outcome or not. This chapter will however focus on the production of advertising that seeks to achieve a novel and appropriate effect for its audience. But before these actions are examined in this chapter it is useful to review the general features of the creative process.

Johar, Holbrook and Stern (2001, pp. 2–3) have identified three ways in which scholars and practitioners perceive the creative process. The first approach, which they describe as a reductionist perspective, suggests creativity is an outcome of a flash of insight and non-formulaic thinking that can neither be repeated nor analysed. This is aligned to a mystical approach identified by Rhodes, Sternberg and Lubart (1999) in which a muse inspires a creative outcome. Even in the commercially focused context of advertising, creative outcomes are often perceived to be the result of intuition. Bengston has noted that advertising practitioners emphasise the influence of ‘lady luck’ on the production of creative advertising (1982, p. 6), while Collantes observes that the majority of advertising practitioners rely heavily on ‘intuitive methods to produce their work’ (2000, para. 2). These perspectives can be aligned to Gestaltist understandings of the creative process that suggest new ideas are the outcome of an immediate ‘spark’ of insight that results from ‘spontaneous expression and impulse’ (Pope 2005, p. 73). This understanding reflects the romantic idea of being inspired while in a ‘spiritual, mystical state’ (Sawyer 2006, p. 71) and the idea that creativity is, as a result, a phenomenon beyond explanation:

The romantic view of creativity, a view held by a good many creative persons ... is that creativity should be left alone ... To examine it under the psychological microscope (telescope), to ask questions of it and expect answers, is, they believe, to insult and possibly endanger it. This may be considered a psychological equivalent of the Heisenberg uncertainty principle in physics: the mere act of attempting to measure something can change the very thing we are trying to measure. Creativity, it seems, may be too fragile to withstand scrutiny. (Amabile & Tighe 1993, p. 8)

The prevalence of this romantic or ‘creator as genius’ view of contemporary advertising is indicated by the lack of case studies in advertising media on how ideas are formed, despite the large amount of commentary on creativity in industry publications and the plethora of awards that celebrate creative outputs. This approach succeeds in maintaining the belief that advertising creativity is a gift possessed

by only a few special individuals and that advertising agencies are the creative pinnacle of the marketing communication sector.

The second means of understanding the creative process in a general sense is the belief that creativity involves 'ordinary mental functions and is, therefore, only quantitatively different from everyday thinking' (Johar, Holbrook & Stern 2001, p. 2). This perspective suggests that new ideas are the result of the imaginative use of formulaic components. When writing about their craft, advertising practitioners commonly describe the creative process as a form of problem solving that is more 'scientific' than the creative process of artists (Bullmore 1999, pp. 60) and therefore is inherently more procedural and repeatable in practice. A large number of 'how to' books on creative advertising, aimed at practitioners, also adopt this approach by focusing on ideation techniques. For instance, *Advertising Creativity* by Mario Pricken offers a series of 'creative kickstarts', techniques that are 'designed to open fresh sources of imagination' (2008, p. 33). This formulaic understanding of the creative process can be easily accommodated in the study of advertising, for it acknowledges that advertising requires imagination over and above the prevailing requirement of meeting a client's goal.

The third approach to conceptualising the creative process, one described by Johar, Holbrook and Stern (2001, p. 2) as integrative, is more heuristic in nature. It suggests the creative process involves cognitive acts that are shaped by the interplay of freedom and constraints. Freedom is commonly conceived as a form of risk-taking, where individuals work on ideas that may fail due to their rejection of convention. Windels and Stuhlfaut state that risk is inherent in the creative process of advertising but is shaped largely by 'creative codes', the agency's 'shared meanings, values, and practical rules of thumb for deciding what is and is not creative; agreements about how ads should look; and understandings about how advertising should be produced' (2014, pp. 795–796). Constraints, which may take the form of an agency's particular approach or the client's requirements, are important as they provide the creative team with a limited field of problem solving. Boden speaks to this when she states, 'Unpredictability is often said to be the essence of creativity but at the heart of creativity are constraints. Constraints and unpredictability, familiarity and surprise are combined in original thinking' (1995, p. 1). However, too many constraints can prove to be problematic. Koslow,

Sasser and Riordan state that in many instances the constraints placed on art directors and copywriters by clients, such as budgets, tight deadlines and audience testing of an advertisement, can have a 'substantial impact' on the ability of art directors and copywriters to develop creative outputs (2006, p. 81). Hackley and Kover (2007) neatly sum up this third perspective by stating that advertising creatives work on the borderline of limits and freedom. This description is useful with regard to the study of advertising creativity as it acknowledges a form of action that is rule based but requires these rules to be adapted to achieve novel outcomes capable of engaging or entertaining target audiences.

In summary, for many practitioners creativity continues to be veiled behind the romantic ideal of the 'creator as genius', while for others it is a cognitive trait, a form of problem solving that can be learned and repeated, or a creative act at the nexus of the limits and freedom afforded to the practitioner. These approaches provide insight into the conceptualisation of the creative process but do not provide enough detail on the precise tasks involved in creative production. Investigation of the use and influence of intelligent agent technologies in the creative process requires an understanding of the communicative relationships involved in the creative act. To this end, attention will now be placed on models of the creative process that seek to break the creative act into a series of stages.

4.2.1 Stage-based models of the creative process

A number of researchers have developed stage-based models that sequentially categorise the cognitive processes and behaviours of those involved in the creative process. Three stage-based models, which have been applied to advertising creativity by practitioners and researchers, will be discussed. The two-stage 'brainstorming' approach, which was developed by advertising practitioner Alex Osborn in the mid 20th century, has been applied widely across knowledge work fields and continues to have currency today for advertising practitioners (Bost 2013). The influential 'classic' or four-stage model of the creative process developed by Graham Wallas (1926) will be reviewed, as will a derivative of this model that was adapted to describe creativity in an advertising context, Young's five-stage model (2003). While these models have attracted criticism for their linear approach and focus on individual

actions, there is a general consensus amongst researchers that they provide some indication of creativity in practice (McIntyre 2012; Sawyer 2012).

According to Sawyer, two-stage models of the creative process are the simplest means of understanding the mental tasks involved in the creative act (2012, p. 88). The two-stage group ideation technique known as brainstorming is a common and thus influential organisational practice in Western countries. The model, which was first outlined by advertising practitioner Alex Osborn in *Applied Imagination* (1953), has been adapted many times, however most versions frame the technique as a two-stage means of developing novel 'solutions' to a defined 'problem'. During the first stage of the brainstorming process a group of participants take part in an ideas generation session during which many possibilities are discussed but are not subject to evaluation of their appropriateness to a given task (Reid & Moriarty 1983, p. 127). Participants are encouraged to build on new ideas when they emerge through a process of free association, the articulation of whatever ideas come to mind while 'trying to avoid conscious choices' (Landa 2010, p. 100). This approach can be aligned with associationist theory, which claims that creativity occurs when ideas 'that are already in the domain and that have been internalized by the creator' are combined to create a new concept (Sawyer 2012, p. 115). A series of high-profile advertising identities have advocated this conceptualisation. According to Leo Burnett, "Creativity" is the art of establishing new and meaningful relationships between previously unrelated things ... which somehow present the product in a fresh, new light' (cited in Vanden Bergh & Katz 1999, p. 408). Young has offered a similar perspective by stating that advertising concepts are 'nothing more nor less than a new combination of old elements' (2003, p. 15). The construction of novel associations is an important concept with regard to the study of creative advertising practice. According to Sawyer, a novel association results when two ideas are juxtaposed to create a new one, for instance 'boomerang flu', an ailment that goes away only to return later (2012, p. 116). Blasko and Mokwa use Koestler's concept of 'bisociation' to explain this process:

A bisociating mind freely confronts and actively seeks to uncover inherent paradox and resolve it through a synthesis of previously unconnected thought patterns or frames of reference. Thus, the creative mind actively seeks novel connections and uses apparently divergent ideas, insights, or perspectives to generate these convergent connections. A synergistic, new whole is created by each connection or set of connections. (1986, p. 46)

It is the role of the creative team to determine how a paradox – an absurdity or contradiction that results from bringing two incongruous ideas together – can be applied to the task at hand. For instance, connecting the notion of ‘boomerang flu’ to an ailment commonly suffered by the audience makes the idea understandable; at the same time, its unusual combination of ideas is likely to attract attention and encourage recall. The first, association-building phase of Osborn’s brainstorming model stresses the importance of developing a large number of ideas. Empirical studies indicate that this is a recognised goal in an advertising context. In a review of studies of the creative process in advertising, Goldenberg and Mazursky state that numerous ideas need to be developed to feed the creative ‘spark’ (2007, p. 292). After the time allocated for the first stage of brainstorming has passed, a second step involves evaluating a large number of solutions with regard to their feasibility (Goldenberg & Mazursky 2007).

The popularity of brainstorming can be attributed to its highly visible results. The approach’s structured and time-bound nature encourages the production of ideas, however the quality of these outputs has been widely questioned. A review of studies on brainstorming by Kohn and Smith (2011) found participants tend to conform to the views of influential participants in a brainstorming group rather than feeling liberated to offer divergent perspectives. While somewhat dated, Kover’s (1995) study of advertising indicated that a group of copywriters disliked the term brainstorming. This scepticism can be attributed to a number of possible factors. Where brainstorming generally involves a group of participants, advertising creatives are more likely to develop concepts in an art director and copywriter team of two. The highly structured approach of allocating particular time limits for idea generation and evaluation may also not reflect the work processes of art directors and copywriters, who move in and out of periods of free association (Johar, Holbrook & Stern 2001). And lastly, brainstorming is rarely an everyday task for employees at most organisations; in contrast, the development of new ideas is a principal task of creative advertising practitioners.

Other researchers contend, through implication, that advertising creatives commonly deploy the principles of Osborn's brainstorming model. Without using the brainstorming label, Smith and Yang (2004) write that the creative process in an advertising context involves the two complementary phases of divergence and relevance:

The first and most essential element of creativity is divergence which ultimately stems from the 'divergent production system'. Once a divergent idea is produced, it must be shaped in a manner to make it relevant (i.e. able to solve a problem, achieve a goal, etc.). (2004, p. 34)

In this model, ideas that do not conform to convention are a starting point of the ideation process; it is then the job of the creative team to find a way of making these ideas relevant to the client's brief. As is the case with brainstorming, this model is problematic as it views the creative process as consisting of clearly defined stages. An iterative two-stage model proposed by Sasser and Koslow (2008) addresses this rigidity of structure:

The first step, which seeks to develop a novel idea, is followed by a second step that aims to integrate this into the problem solving process and generate other elaborations. This second step is rarely solved perfectly, introducing a tension solved by another novel departure, then an integration/elaboration, yet another tension and departure. (2008, p. 13)

Importantly, Sasser and Koslow's model proposes that ideation is incremental nature in nature; that a new idea is the result of a series of small associations that occur over time rather than an outcome that is the result of a structured and time-bound experience. It is worth noting that all of these two-step approaches revolve around participants' application of existing knowledge and experience. As such, they ignore the influence of exposure to new information that can occur at various intervals within the creative process. Other researchers have sought to address this influence through the development of more extensive stage-based models.

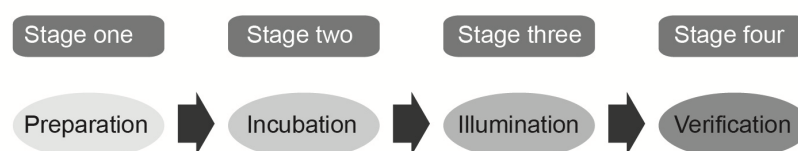


Figure: 4.1: Wallas' four-step model of the creative process (Wallas 1926)

The 'classic' or four-stage model is heavily procedural and, as is also the case with two-stage models, is favoured by researchers who predominantly see creativity as a form of problem solving. Introduced by Graham Wallas in *The Art of Thought* (1926), this still influential model considers that the creative process involves alternating periods of conscious and unconscious thought (Pope 2005, p. 73). It identifies four steps in the development of a creative outcome: *preparation* – work that draws on education, analytical skills and the building of relevant knowledge; *incubation* – the stage at which no conscious mental work on the problem occurs; *illumination* – the step in which a promising idea breaks through, the so-called 'aha' moment, and; *verification* – the testing of an idea (Lubart 2001, p. 295). According to Pope, the largely unconscious stages of incubation and illumination are where most of the creative work is undertaken and are 'flanked' by the more conscious acts of preparation and verification (2005, p. 73).

In a key difference to the two-stage models, and the brainstorming paradigm in particular, Wallas' approach highlights the role of unconscious thinking – an inclusion that hints at the unpredictability of the creative act. By the 1950s there was said to be considerable agreement amongst creativity researchers that these steps describe the creative act (Lubart 2001). However, a number of researchers have since adapted the Wallas model to include sub-processes that further describe the complexity of the creative process. Amabile (1996) argues that the preparation stage should incorporate a problem-finding step; this approach identifies the importance of research and the discussion of preliminary ideas. Other researchers have called for an additional stage of 'creative frustration' to describe the point at which an individual feels unable to develop a new idea and must decide whether to start from the beginning or reconceptualise the problem (Lubart 2001, p. 297). Sawyer has proposed an eight-stage process that 'captures the key stages of all the various stage based models' that have been developed (2012, p. 88). The first stage of Sawyer's model involves finding and formulating the problem; the next is the acquisition of problem-relevant knowledge; the third step requires the gathering of a broad range of potentially related information, including unexpected or seemingly unrelated pieces of information; the fourth step involves incubation or unconscious processing of information; step five calls for the conscious generation of potential solutions to the

problem; this is followed by a sixth step of combining ideas in unexpected ways; and finally, in the seventh step, the best ideas are filtered through the application of relevant criteria. Once the creative process is complete, Sawyer suggests that the final idea is then handed over to peers for evaluation.

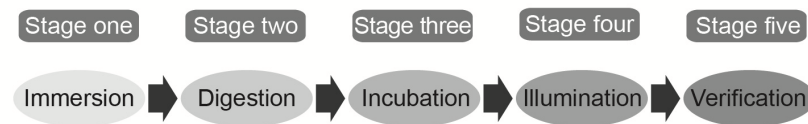


Figure: 4.2: Young's five-step model of the creative process (2003)

In addition to the interpolation of intermediate stages, the Wallas model has been contextualised to accommodate the study of creativity in specific areas of practice. A stage-based model developed by US advertising practitioner James Webb Young gained considerable attention amid the industry's 'creative revolution' in the 1960s and 1970s (Figure 4.2). Bengtson has described Young's model as having 'a profound effect on how advertising practitioners, educators, and students conceptualise idea generation and its attendant processes' (1982, p. 4). Several decades after this observation, the model can still be found in contemporary textbooks on advertising in Australia, such as *Advertising: An Integrated Marketing Communication Perspective* by Belch et al., where the model is presented as one of the most 'popular approaches to getting ideas' (2014, p. 321).

Young's *A Technique for Producing Ideas*, first published in 1939 and still in print, identifies the creative process as encompassing five stages: *immersion* – a research stage that includes taking an interest in a broad spectrum of sources and the gathering of 'raw materials'; *digestion* – the act of looking for relationships between collected materials; *incubation* – turning the problem over to a relaxed mind; *illumination* – when the idea arrives or the 'eureka' moment happens, and; *verification* – making the idea fit its purpose and submitting it for criticism (Young 2003; Belch et al. 2014, p. 321). The model has many similarities to Wallas' approach, including the movement between conscious and unconscious thinking, however by including an initial research stage Young highlights the importance of exposure to external sources of inspiration for advertising creatives. In addition, he claims research

should involve the collection of two types of materials: specific information that relates to the product and its consumer, and more general reference points that enable the creator to identify novel combinations (Young 2003, pp. 24–25). This expansion represents greater consideration of task-specific research activity, and reflects Sawyer's contention that 'most of the daily work of creativity is conscious and directed' (2012, p. 103). Influential practitioners in Western advertising have similarly reinforced the importance of task-specific research and exposure to large amounts of information in general. For instance, advertising luminary David Ogilvy has written:

Big ideas come from the unconscious. This is true in art, in science, and in advertising. But your unconscious has to be well informed, or your idea will be irrelevant. (1985, p. 16)

More recently, former creative director Ralf Langwost offered a similar sentiment in the industry publication *AdNews*:

There is a lot of logic involved in the creative process. Any idea is a new combination of existing information. But how many pieces of information do you need to make this new combination? This process of gathering information is actually very rational – the input defines the output. Talent helps, but hard work also relates to success. (cited in Messer 2008, p. 8)

These perspectives suggest the importance of the collection of research materials to develop new associations, a consideration that was largely omitted by Wallas' model. It is worth pointing out that the Wallas model was developed to consider creativity in a general rather than discipline-specific sense, a difference Young has acknowledged by highlighting the importance of immersion in diverse and plentiful sources of information:

Every really good creative person in advertising whom I have ever known has always had two noticeable characteristics. First, there was no subject under the sun in which he could not easily get interested – from, say Egyptian burial customs to Modern Art. Every facet of life had fascination for him. Second, he was an extensive browser in all sorts of fields of information. For it is with the advertising man as with the cow: no browsing, no milk. (2003, p. 24)

This statement indicates that exposure to cultural representations has been a fundamental aspect of the creative process of advertising creatives for quite some time. Young could not have envisaged the Internet browser, however this software has become the window onto historical and contemporary social life and opinion used by creatives to access ideas on art, literature and popular culture as well as other advertisements. This collecting of ideas is a common feature of many contemporary 'how to' books on advertising creativity, for example, Burtenshaw, Mahon and Barfoot write:

Creative teams have often been compared to magpies, continually collecting ideas, pictures, cuttings from magazines and anything else that they feel is worth storing away, providing creative inspiration that can then be drawn upon at a later date. (2011, p. 91)

Examples of informational fossicking are not difficult to find. In *Creative Leaps*, practitioner Michael Newman identifies the inspirations for a number of advertisements, including the use of a photograph of a heavily pregnant woman to communicate the 'wide-body' benefits of a Toyota Camry, an image inspired by a photograph of actress Demi Moore that had appeared on the cover of US magazine *Vanity Fair* (2003, p. 248). In addition, a television commercial for the insurer NRMA that presents the dramatic impact of a storm on a ladybird is said to have been inspired by the detailed world of insect behaviour captured by the 1996 French documentary *MicroCosmos* (Newman 2003, p. 105). Both examples suggest exposure to a range of media texts – part of the stage of preparation in the Wallas model or immersion in Young's adaptation – to create new associations, that is, a pregnant women and a family car, or insects being threatened then protected. In the network society era, the research actions described in these examples would involve access to digitised objects which are much more accessible and can be stored indefinitely on a range of networked databases. Accordingly, Internet browsing and searching present themselves as creative process tasks that are affected by software systems in possession of intelligent agency.

While the actions described by the Wallas model have been revealed to exist in creative production (Griffin & Morrison 2010; Sawyer 2012; McIntyre 2012), stage-based models have also been widely criticised. Wiesberg (1993) has suggested that the creative process is shaped by social conditions and cannot be reduced to a structured series of actions. Sawyer elaborates by noting that the linear and fixed structure of the four-stage model of the creative process precludes the possibility that the creator is also working concurrently on other projects. He also notes that stage-based models generally consider the moment of 'insight' to occur in one major event rather than as a range of 'mini-insights that in addition to periods of incubation are not separated through time' (Sawyer 2006,

pp. 70–71).¹⁸ A similar criticism has been levelled at Young's five-stage, advertising-focused model of the creative process.¹⁹ In his critique of the model, Bengtson (1982) describes Young's 'assembly line' approach as a simplification of the creative process and notes that its chronology of events is rarely predictable in practice. Bengtson suggests Young's closed system precludes serendipity – accidental discoveries or chance encounters that can trigger new ideas, both of which can occur at any stage of the creative process. While at first the concept of serendipity seems analogous to the reductionist concept of luck, or the assistance of a muse, it can also be considered an outcome of practitioners placing themselves in situations that invite unpredictable information-gathering experiences. An example is reading extensively about a topic that has little to do with the task at hand but in effect inspires a new idea either for a current project or for a future advertisement. On this point, Young's sequential approach appears out of step with contemporary notions of creative practice. With an assembly line, all actions must occur in a fixed order to achieve the desired (and identical) end result; however it appears that while Young was in favour of a mechanical approach to ideation, his discussion of unconscious thinking reveals an awareness of cognitive processes that allow indetermination. Contemporary creative advertising agencies commonly acknowledge the value of uncertainty, for example, the influential US agency Wieden+Kennedy describe this quality as being fundamental to the creative process (Casso 2011).

Bengtson is critical of Young's inclusion of a stage of immersion or the gathering of raw materials, a key point of departure from the Wallas model. He contends that knowledge building is a 'double edged sword' that in some instances is can lead to the forming of a relevant new association but warns that immersion in too much task-specific information can impede the ideation process. He writes:

Knowledge directs thinking. It is, in this sense, hazardous to one's creative health, for knowledge is the guardian of the status quo and a formidable foe to forces that threaten it. (1982 p. 6)

¹⁸ Griffin and Morrison note that while Wallas considered creative process phases to be sequential and discrete, he also stated that stages could be revisited once they are completed in their original sequence if required (2010, p. 7).

¹⁹ Young embraced the idea of a Fordist approach to advertising production, stating that 'The production of ideas is just as definite a process as the production of Fords ... [it] too runs on an assembly line' (Young 2003, p. 5).

It is worth noting that Bengtson's criticism of Young's model of the creative process occurred well before the age of networked and mobile telecommunications, technologies that intensify the volume of information that may be introduced into the creative process. In the network society era, online databases can be immediately accessed at any time and, with a few exceptions, in any place. It is this development that has allowed intelligent agents that filter online media content on behalf of the user to play an increasing role in the creative process, particularly with regard to research actions.

A number of key features of the stage-based models are relevant to the study of the effects of Google search on the creative process of art directors and copywriters. They are useful for their identification of creative process actions, such as free association, the alternation of conscious and unconscious activity, and the need for diverse research material to be fed into the ideation process. Importantly, the temporal nature of these models allows us to understand when intelligent agents are deployed in the creative process. Predominantly they are involved in the preparation stage, as described by Wallas, or Young's phase of immersion in research materials, but the possibility exists that these technologies, which have the capacity to 'think' for themselves, are capable of making associations on behalf of the user. For instance, on the basis of their knowledge of the user and an anticipation of his or her intention, adaptive search engines present tailored search results that shape the online content introduced into the creative process. The incubation period may also be influenced. A creative may be taking a break from conscious consideration of the project, yet be exposed to a novel idea when Google search is used for an unrelated search query. Moreover, while illumination is a task that cannot be delegated, the task of verification may be 'outsourced' if the search engine is applied to evaluate the originality of a creative concept.

4.2.2 Sociocultural modelling of the creative process

Rather than seeking to categorise the tasks taken by the individual in the creative process, the systems model developed by psychologist Mihalyi Csikszentmihalyi (1988; 2014) is concerned with the relationships and interactions of the various actors involved in the formation of a creative outcome (Figure 4.3). The model draws attention to the relationships between three systems: the creators of an

idea, the field that judges the idea, and the domain that provides a cultural context and decides whether to retain an idea for use in future variations of creative products.

What we call creativity is never the result of individual actions alone; it is the product of three main shaping forces: a set of social institutions, or field, that selects from the variations produced by individuals those that are worth preserving; a stable cultural domain that will preserve and transmit the selected new ideas or forms to the following generations; and finally the individual, who brings about some change in the domain, a change that the field will consider to be creative. (Csikszentmihalyi 1988, p. 325)

The field consists of a body of experts who determine what is accepted as being creative and will thus be disseminated; levels of expertise, status and power vary within this group (Sawyer 2012, p. 216). In the context of creative advertising, the field consists of the industry, the client, the agency and the target audience, all of whom have a say in determining whether an advertisement achieves a novel effect and is appropriate to a predetermined goal, such as communicating a selling proposition. The domain consists of the creative products that have been accepted by the field and the broader cultural conventions – languages, symbols and notations – shared by members of the field (Sawyer 2012, p. 216). In the case of advertising creativity, art directors and copywriters draw a series of symbolic meanings from the domain and seek to produce a novel variation that the field recognises as creative and the domain accepts as a cultural object that is worth remembering. Rather than presenting a linear process that starts with the creator, a key strength of this approach is its circular causality, which acknowledges that the creative process does not always commence with a fixed and predictable event, such as the desire of the individual to perform an act of creation. In the case of advertising, a new idea may start with the client or be sparked by information drawn from the domain. All participants in the creative process can affect and be affected by the actions of other systems. The notion of the creator as an individual genius working in isolation is challenged by Csikszentmihalyi's claim that a 'new' idea existed long before the creative person arrived on the scene; it was 'stored in the symbol system of the culture, in the customary practices, the language, the specific notation of the "domain"' (2014, p. 51). Under this model, the creative person draws information from the field to develop a variation of what has come before; it must then be judged by the field to be novel and appropriate before it can be passed back into the domain to form the basis of future variations.

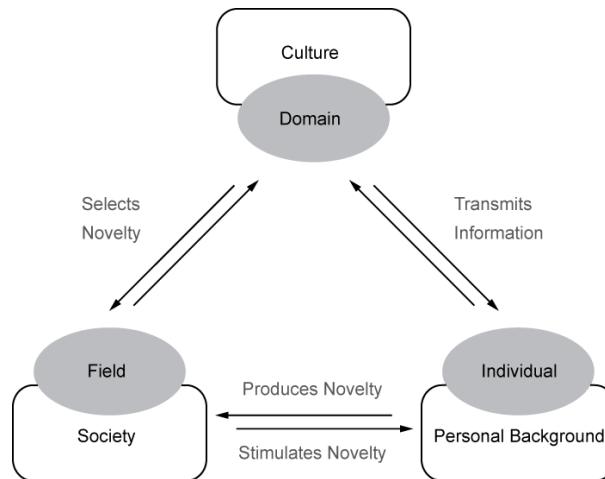


Figure 4.3: Csikszentmihalyi's systems model of creativity (2014)

Aside from reinforcing the view that the creative process does not occur in a social and cultural vacuum, the strength of this model is its accommodation of unpredictability, looseness of structure, and identification of complexity of interactions that influence the creative process. It does not seek to understand creativity as a formalised series of repeatable steps but instead as interlinked communicative relationships that change in response to different contexts. In effect, it suggests that novel outcomes are a result of novel processes. In this respect it presents a significant departure from stage-based models.

The systems model has been applied to various creative industries, including popular music and television production (McIntyre 2012), as an alternative to stage-based models. The article 'Is Advertising Creativity Primarily an Individual or Social Process?' by Vanden Bergh and Stuhlfaut (2006) applies Csikszentmihalyi's model to advertising practice and challenges the perception that art directors and copywriters work in isolation (Figure 4.4). Closely following the framework established by Csikszentmihalyi, the authors trace relationships between different systems by analysing case studies on the production of high profile advertisements. They used 'Moment of Creation' case studies written for *AGENCY* magazine from 1991 to 2001. Their classification of data gathered from these articles indicates that 42.5 per cent of practitioners referred to the influence of creators when discussing the development of a high profile advertisement, 23 per cent referred to the field's

influence and 34.5 per cent referred to the domain (Vanden Bergh & Stuhlfaut 2006, p. 387). These findings support the argument that advertising is a collaborative process that extends beyond relationships inside an agency or between an agency and its clients. Importantly, the study underscores the considerable influence the domain has on the ideation process and by implication reveals the importance of communication channels used by creatives to collect cultural representations. While Vanden Bergh and Stuhlfaut did not seek to identify the communication channels used by the three sub-systems, a number of their conclusions assist the investigation into the influence of intelligent agent technologies, such as adaptive search engines, on advertising creativity.

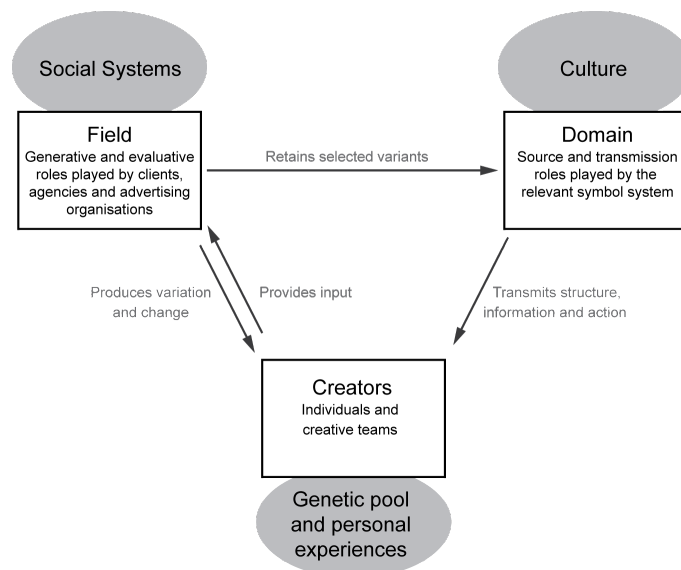


Figure 4.4: Vanden Bergh and Stuhlfaut's adaptation of Csikszentmihalyi's systems model (2006, p. 382, Figure 1)²⁰

Vanden Bergh and Stuhlfaut offer a number of insights into collaboration within creative teams and their relationship with other creative process participants. While the authors identify the 'genetic pool and personal experiences' (2006, p. 381) as shaping the ideation processes of creators, the systems model highlights the influence of direct and indirect interactions amongst the creators, the

²⁰ In what would appear to be a departure from Csikszentmihalyi's model, the authors' chart suggests a one-way flow of information from the domain to creators. However their analysis within the article describes practitioners as both collecting and receiving symbols from the domain; accordingly, this arrow could be interpreted as a flow, rather than either a push or a pull, of information.

field and the domain. They note that art directors and copywriters exhibit a high degree of collaboration, a conclusion that is to be expected given the widespread adoption of the creative team paradigm. Evidence is provided to suggest art directors and copywriters move in and out of individual and collaborative creative process actions. In addition, the model acknowledges that roles are fluid. For instance, information communicated by clients often plays a role in the ideation process, with Vanden Bergh and Stuhlfaut (2006) identifying how comments made by a marketing manager can form the basis of a new idea that is refined by the art director and copywriter team. In this instance, a member of the field is also a creator of the advertisement. The authors also point out that the creators are also members of the domain, the system from which they draw ‘ideas, symbols, experiences, and artefacts’ into their ideation process (2006, p. 382). The model can also be employed to consider collaborative storytelling approaches. When audiences contribute to the brand narrative via conversational media, such as the Coke Mentos case study (Spurgeon 2008) discussed in Chapter Three, they share the role of creator with the agency staff who initiate or guide the campaign.

Table 4.1: Participants in the advertising process categorised by component of the systems model of creativity (Vanden Bergh & Stuhlfaut 2006, p. 374, Table 1)

Creator	Field	Domain
Art directors Copywriters	Account managers Account planners Audiences Clients Creative directors	General society

Vanden Bergh and Stuhlfaut state that the field fulfils two roles in the creative process: the provision of ‘guidance, support and opportunity’ and an evaluative function as a ‘gatekeeper’, judging the novelty and appropriateness of an idea (2006, p. 390). Advertising agency staff, including account managers, account planners and the creative director, in addition to the client and the target audience, are considered by Vanden Bergh and Stuhlfaut to be part of the field system. But that is not to say all of these participants have equal degrees of influence: clients, in an advertising agency context, wield the

power of veto over the form of the final advertisement. The 'guidance' offered by field participants may include the communication of feedback – generally by an experienced creative such as the creative director – to the creative team on proposed advertisement concepts prior to presentation to the client. According to McStay, the creative director 'raises questions about what literally passes for a good idea, what the criteria are, potential relationships between creativity and experience, and what makes one innovative idea better than the other' (2013, p. 26). 'Support' and 'opportunity' refer to the organisational environment in which a creative team operates. On this point, Ewing, Napoli and West claim that conventional management practices do not work with creative staff in advertising agencies, where the key challenge for managers is to balance control and freedom (2001, p. 163). Instead, it is commonly noted that structures that allow for risk-taking are more suitable (Ensor, Cottam & Band 2001; Ashley & Oliver 2010).

The concept of risk-taking in this context can be understood in terms of the field giving participants the leeway to work on ideas that significantly challenge convention. This is an area with a well-established body of research. Ewing, Napoli and West have noted the prevalence of flat organisational hierarchies and 'participative management' in advertising agencies to foster creativity (2001 p. 148), while Hogg and Scoggins (2001) and Tellis (1998) suggest greater creativity in advertising is likely to emerge from advertising agency creative departments that exhibit greater freedom from rules. That is not to say that creative teams operate in rule-free zones. According to Bengtson:

Perfect freedom is not to be cherished in creative circles. Too often it legitimizes unproductiveness while inviting melancholy. Instead of being the feared enemy, deadlines are creative catalysts. They prod where freedom pampers. (1982, p. 9)

Finding a balance between freedom and constraints goes beyond deadlines, with managers generally allowing creative teams to develop their own methods of working rather than following strict or standardised procedures. As Ewing, Napoli and West put it, 'a key challenge to creative managers is to balance and optimize the degree of freedom and control allowed in the creative process' (2001, p. 163).

The second influence of the field revolves around the evaluation of a new idea that has been developed by the creative team. Vanden Bergh and Stuhlfaut (2006) argue that an idea is not creative until it is recognised as such by experts, that is, the field. In the context of advertising, this includes other agency staff, the industry, the client, and target audiences. As discussed in the previous chapter, perceptions of creativity differ amongst actors in the advertising production process, with creatives often placing greater emphasis on originality or artistic merit than do the account managers and client, who are more likely to focus on an adherence to strategic imperatives. Audiences, who present a less direct influence, have been found to perceive entertainment as the hallmark of advertising creativity (West, Kover & Caruana 2008). These layers of influence are complex and interrelated. For instance, once a creative director has approved an advertisement, and various levels of account managers have accepted that the idea meets the brief and the client has ticked off on the final concept, the audience also must judge the advertisement as being creative if it is to achieve a position in the domain where it is collectively remembered for its novelty and appropriateness.

Vanden Bergh and Stuhlfaut describe the domain as 'the relevant symbolic subsystem of the greater culture that provides useful information or stimuli for the idea' (2006, p. 374). The domain is important to both creative and conventional advertising; but a key difference emerges in how it is deployed. Creative advertising practitioners seek to develop messages that present familiar symbols, which have been drawn from the domain, in unfamiliar contexts. In contrast, conventional advertisements communicate these symbols with minimal variation – the familiar is presented as a general cultural backdrop for the advertisement. A secondary creative process function of the domain is the selection of what to keep in its collective consciousness. In effect, the domain is the principal gatekeeper of a creative variation, and Vanden Bergh and Stuhlfaut argue: 'The field has the first say about what is or is not creative within the systems model of the creative process. The domain has the final say' (2006, p. 391). In the context of creative advertising, the field (client) determines the brief, thus shaping the constraints that the creator works in; other members of the field, the agency, shape the creative response to the allocation of resources or particular creative codes. Industry perceptions of what constitutes novel advertising are communicated through industry commentary and awards for

creativity. The audience is also capable of determining creativity as creators attempt to pre-empt what this group would accept as being a novel variation. All of these factors play a role in the final shape of the creative advertisement. As is the case with other forms of popular culture, if an advertisement is collectively remembered by the domain it then becomes part of the repository of cultural representations that can then be used in the future by other art directors and copywriters. That is not to say that art directors and copywriters only consider previous advertisements when developing new ideas, but advertisements maintained by the domain play a key role in the ideation process. While Vanden Bergh and Stuhlfaut reinforce the influence of the domain on advertising production, their research does not consider the communication channels used by art directors and copywriters to access this information.

4.2.3 Connecting to the domain

An understanding of the domain in which advertising creatives operate allows for exploration of the communication flows that may be shaped by intelligent agents, such as Google search. The concept of cultural literacy is one aspect of the domain. An awareness of cultural literacy is required to develop messages that are novel enough to surprise the audience but also familiar enough to be understood.

According to Schirato and Yell:

Cultural literacy can be understood ... as a 'feel' for negotiating those cultural rules and systems – for 'making your way' through culture. And practice can be understood as the *performance* of cultural literacy' (2000, pp. 1–2, authors' emphasis).

For advertising creatives, cultural literacy provides a series of signposts that identify the conventions that form part of the domain. The domain is effectively culture, which places limits on what can be said. Creatives do not strictly use the domain; rather they are shaped by it. To encourage the audience's sense-making of a collection of symbols, advertisements adhere to a series of patterns that are familiar within a particular culture. Advertising creatives seek to produce messages that will resonate with large audiences, and this can only happen if the messages fit within existing expectations. Research conducted by Goldenberg, Mazursky and Solomon (1999) concludes the majority of advertisements follow overarching templates or patterns that do 'not prescribe the

outcome' of the creative process, but rather suggest the constraints around which idea generation must conform. In effect, they are suggesting that the field – which is inclusive of the client, agency and audience – limits how symbols that have been drawn from the domain and developed into a new association can be applied. The authors argue that these templates – while less transient than the ideas placed within them – exist in a constant state of change and adaptation. Six core templates are identified: pictorial analogy, extreme situation, consequences, competition, interactive experiment, and dimensionality (Figure 4.5). Each template includes 'versions' or sub-sets of a template that become vessels for the communication of novel associations. The authors use the example of a tennis ball manufacturer's award-winning advertisement to promote their involvement in the French Tennis Open (Figure 4.6). The advertisement presents a pictorial analogy; a croissant-shaped tennis ball on a plate is depicted in a reference to the location of the tournament. One series of symbols is replaced by another and linked through the texture of the croissant and the accompanying text (Goldenberg, Mazursky & Solomon 1999, p. 334). The reader can decode the meaning of this advertisement because they can recognise the symbols used in this analogy and enjoy the process of decoding its role in the narrative. This can occur because they are implicitly familiar with the use of pictorial analogy in advertising through repeated exposure to similar advertisements that use the same pattern.

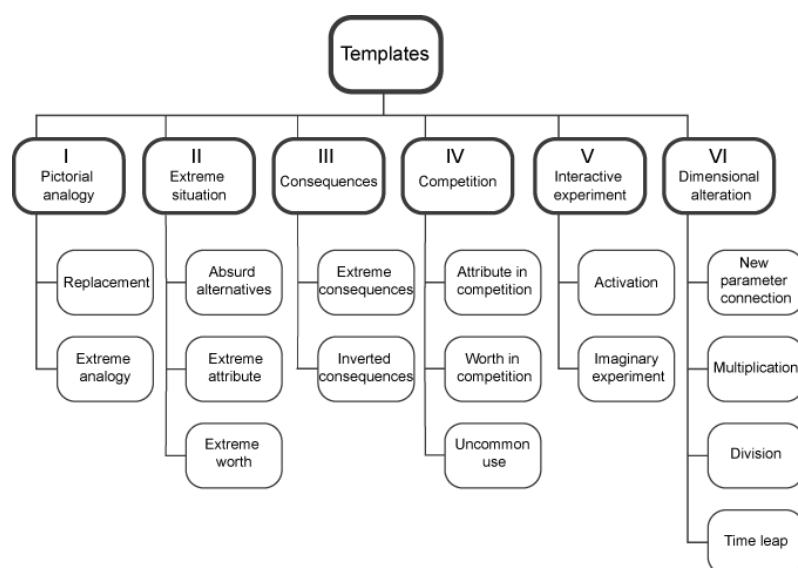


Figure 4.5: Taxonomy of creative advertising templates (Goldenberg, Mazursky & Solomon 1999, p. 344, Figure 4)

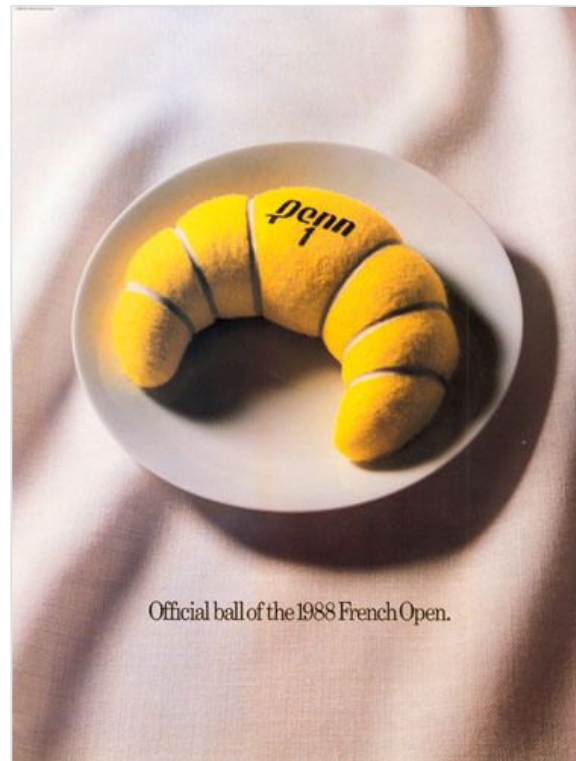


Figure 4.6: An advertisement for Penn that, according to Goldenberg, Mazursky & Solomon (1999, p. 334, Figure 1a), reflects the pictorial analogy template

While not mentioning the term ‘template’ per se, an empirical study of the creative process by Johar, Holbrook and Stern (2001) offers a similar approach to understanding the creative process of art directors and copywriters, in which the authors conclude that creative teams appear to follow a framework based on a series of mythic structures. Framing their analysis around the taxonomy of mythic orientations identified by Northrop Frye in *Anatomy of Criticism* (1957), the researchers found the advertisements developed by a sample of advertising creatives fell into four conceptual categories: comedy, romance, tragedy and irony/satire. The researchers do not conclude that art director and copywriter teams were aware of these categories but instead claim creatives gravitate implicitly to mythic approaches – symbols that originate in the domain – but are limited by the field through its determination of which combination of mythic structure are deemed novel and appropriate. Johar, Holbrook and Stern concluded that the creative team that sought to develop a large number of associations that could be categorised in several different conceptual categories produced a stronger final advertisement than creatives who focused on building associations pertaining to just one

category (2001, p. 23). Despite their different approaches to categorisation, both the Mazursky and Solomon and Johar, Holbrook and Stern studies imply the involvement of media channels that expose creatives to domain and field influences.

The balancing of novelty and convention is a difficult task for the creators of advertisements, one that is achieved only when the meaning systems within an advertisement fit with the audience's cultural literacy. To achieve this, creatives must make judgements based on their perceptions of an audience's meaning systems, a process that requires them to 'step into the shoes' of their audience. While noting that advertising creatives tend to disregard the application of communication theory in their work, Kover's study on the creative process of copywriters concludes that creatives write for a hypothetical audience (1995, p. 600). The study's findings suggest this process enables copywriters to consider whether the meanings embedded in a message adhere to convention and, consequently, the degree to which they can alter these conventions yet remain meaningful to an audience. As Kover points out, this approach aligns to the reader-response theory as documented by Wolfgang Iser (1978), which presents a distinction between the implied reader and an actual reader of a text. An implied reader is one that is imagined in the production of a work, while the actual reader refers to those who actually read the work. Both are relevant when discussing the domain and its role in the creative process. Advertising creatives develop messages that are written for the implied reader, who 'stands in' for the target audience, and this shapes the creative process. The message is based on presumptions about the implied reader's cultural literacy. Kover's research suggests the implied reader is often a relative, acquaintance or friend, someone the copywriter is familiar with and who can thus be used to evaluate or reify the target audience. The role of the implied reader further solidifies the effect of the domain on the creative process of advertising creatives. As Davidson succinctly puts it, 'It's advertising's job to understand the complexities of consumer behaviour' (1992, p. 26). But how do art directors and copywriters find out about their reader? In the past this task was achieved through individual observation or memory, however in the network society, knowledge of the implied reader is also drawn from the online world via search engines with intelligent agent capabilities. The Internet allows for a greater understanding of cultural representations that resonate with audiences, for

example audience-generated memes. The particular interests of potential audiences are now more directly accessible than they were when feedback in the form of market research was the only option. The relationship between the domain and the creator facilitated by search engines is not limited to this form of audience research.

Another principal and interrelated aspect of this relationship involves the combination of cultural presentations that are used to construct creative advertising. Intertextuality emerges as an important concept in understanding how art directors and copywriters produce messages that respond to the cultural literacy of a target audience and communicate with the cultural domain in which both exist. Schirato and Yell write:

Intertextuality refers to the process of making sense of texts in reference to their relations with other texts. It involves the circulation and exchange of meanings, not as atomised bits (words/signs) but as packages of meaning. (2000, pp. 53–54)

These ‘packages of meaning’ are inscribed as ‘traces of texts’ that the audience carries (Wakefield 1990, p. 164). While all advertisements are based on patterns that are themselves packages of meaning, unconventional elements within advertisements are given meaning through their relationship with other popular culture texts, a circular causality that to some degree subverts existing templates or narratives. These references may be subtle, such as inclusion of a popular music style, or may be overt references to a television character, scene or scenario. For example, a television advertisement featuring a comically egotistical office manager who regularly, and often inadvertently, insults his staff is intertextually linked to the popular British sitcom *The Office* and its American counterpart. Because of their familiarity with the meaning systems presented in *The Office*, audience members are able to recognise the ‘boss from hell’ trope and they aren’t left wondering what this character has to do with the product being advertised; it is understood that he is an entertainment device used to sell a product.

Intertextuality is not just about the reader, but also importantly offers a means of explaining how media are constructed. As McQuail puts it:

Intertextuality is ... also a feature of media themselves, which are continually cross-referencing from one medium to another, and the same ‘message’, story or type of narrative can be found in very different media or genres. (2005, p. 387)

In the creative process, intertextuality involves the conscious and unconscious collection of texts, and their insertion into a new advertisement is capable of achieving a surprise effect. This process needs to make a balanced choice in order to reference symbols that are sufficiently familiar to an audience yet are not already widely applied in other advertisements. Burtenshaw, Mahon and Barfoot speak on this in their 'how to' book on creative advertising:

You can only do something different and get people talking if you're the first to do it. When other brands start to follow your lead, it's time to change tack and do something else. (2011, p. 157)

The symbol of an egotistical boss subverts conventional narratives in advertisements but is accepted because of its cross-referencing of a popular sitcom. However, if a large number of other advertisements featuring egotistical bosses emerge at the same time as this advertisement or shortly after, the effect of surprise is diluted. This form of replication is a common occurrence for the advertising industry; it further suggests the value of collecting novel sources of inspiration that are capable of resulting in unconventional outcomes, yet this action is complicated by the dominant stylistic traits embraced by contemporary advertising.

Contemporary advertising has often been described as presenting a postmodern aesthetic and mode of construction (Davidson 1992; Cross 1996; Cummins 1996). An understanding of this approach – both in terms of the creative process and creative product – offers an example of how the field intersects with the domain, and situates the role of software in the creative process. Felton describes postmodern advertising as:

A lot of things: an irreverent, I know-this-is-an-ad attitude; an awareness that people are becoming increasingly cynical about advertising; an appreciation of advertising's past excesses; a critique of consumerism; a return to early advertising forms but now with an ironic attitude (2006, p. 226).

It is evident from Felton's description that postmodern advertising, as is the case with postmodernism in a broader sense, covers a lot of conceptual territory. Before these different dimensions are considered it is useful to review the styles of advertising that came before the postmodern. Cummins (1996) has identified three dominant approaches to advertising in terms of aesthetics and techniques: premodern, modern and postmodern. Premodern advertising, the first approach to develop, is anchored in the principles of literary realism by reflecting the perspective that 'the universe is finite,

orderly, sensible and complete' (Nash cited in Cummins 1996, p. 62). This form of advertising commonly presents unambiguous sales propositions that provide 'answers to human dilemmas' (Cummins 1996, p. 62), and in doing so relies heavily on redundancy rather than the inclusion of entropic message elements.

The next approach, modern advertising, saw the emergence of a new relationship between products and consumers. Modernist advertisements commonly present aspirational messages, as it is believed 'consumers not only attended to the product itself but the characteristics of the models and the attractiveness of the setting in order to know how to achieve an ideal self' (Hovland & Wolburg 2014, p. 68). This approach reached its zenith following advertising's 'creative revolution' when often metaphoric elements of novelty were introduced to attract the attention of the consumer. For Odih, the modernist approach defines the 'golden' era of advertising, a period characterised by 'allegory, ambiguity and irrepressibility' (2007, p. 113). Rather than focusing on the repetition of a 'show and tell' sales proposition (Auletta cited in Deuze 2007, p. 255), creative advertisements with a modernist sensibility present a distinctive vision of the world and the product's and consumer's place in it. The use of divergent or entropic message elements presented as illusion and fantasy play to a modernist script that celebrates 'big ideas', a concept popularised both within and beyond the advertising industry by David Ogilvy (cited in McStay 2013, p. 28).

Davidson writes that the 1980s saw the emergence of a postmodern style of advertising that was less about 'fibbing' and more about 'art direction, wit, manipulation of fantasies' (1992, p. 61). Carlton Draught's *Big Ad* (2005) (Figure 4.7) is an example of the approach's desire to break illusions about advertising while continuing to encourage consumption. A parody of British Airways *Face* advertisement (1989) (Figure 4.8), it is heavily self-referential in its celebration of the cost and grandeur of a large-scale television commercial. It aims to bring the viewer in on the joke to encourage them to feel good about the product being promoted. Self-referential approaches are commonly employed because most audiences have grown up with advertising; they have been part of an era of media saturation that has allowed them to be familiar with many of the 'behind the scenes'



Figure 4.7: Carlton Draught's *Big Ad* television commercial (2005)



Figure 4.8: British Airways' *Face* television commercial (1989)

conventions of advertising. As a result, they find pleasure in recognising the conventions and in return advertisers play on this assumption of control. While self-referentiality and parody have been used for *Big Ad*, art directors and copywriters regularly employ the postmodern trope of pastiche, the imitation of a particular style without satirical critique. It is often used in advertising in the form of the homage in which old advertisements, for example, are revitalised for nostalgic association. Rather than offering a solution to a universal problem or aspirational messages, these postmodern approaches eschew the hope of stability, undermine all hope for illusions of significance and expose artificiality (Cummins 1996, p. 62). While imbued with a mix of cultural meanings, the playfulness and self-reflective nature of postmodern advertising makes no attempt at signification or classification (Odih 2007). Or as Ward

puts it, postmodern popular culture, of which advertising is a widely consumed form, offers no deeper meaning, as it is 'all about surface, the execution' (2003, p. 68). For the audience, Davidson explains, this style of advertising will not solve problems but it may make life more enjoyable (1992, p. 148). Indeed, the primary function of this particular approach to creativity is to entertain.²¹ While advertising as entertainment is common in the contemporary era of marketing communication, it is worth noting that premodern and modern styles, with the latter also capable of producing a novel effect, are still produced in large amounts and that the boundaries between these styles are often porous.

As Jensen (2012) has noted, referring to existing texts to guide an audience's sense-making of a new text is a trait of all communication, yet postmodern advertising takes this communicative act to the extreme. Rather than seeking to develop an original narrative in the modernist sense, it recycles past cultural representations drawn from the domain and accepted by the field in order to construct novel messages for audiences. As Davidson (1992) points out, postmodernism provides art directors and copywriters with a rich source of creative inspiration. In the case of advertising as pastiche, for example, it positions art directors and copywriters as hunters and gathers of media texts that are then rearranged into a new message. In terms of advertising production, the construction of this style of messaging challenges the principles of creative advertising in the modernist sense. Rather than seeking to develop an 'original' idea in which texts are less consciously conceived by the producer and decoded by the audience, the postmodern aesthetic encourages the conscious act of recycling and mixing up of cultural symbols to form a new association that refers directly to its source material. There is of course more to developing a postmodern style of advertisement than consciously

²¹ Hitchon and Jura have identified four categories of text that are employed in the construction of postmodern advertising: archetypical texts, silver screen reflections, celebrity endorser and self-referentially. It is useful to consider these approaches prior to the discussion of how postmodern advertisements are constructed. Hitchon and Jura claim the use of 'archetypical texts' is a common approach that presents generally recognisable symbols that can be traced to other texts within a particular culture. Writing at the end of 20th century, the authors identified the referencing of popular movies as a postmodern approach. In the network society period this can be extended to include videos uploaded to peer-to-peer file sharing sites like YouTube that consist of a combination of both professional and amateur imagery. Celebrities, living and deceased are used as endorsers as a result of 'subscribing to a textual, symbolic character'. This is not the delivery of a sales message in isolation but rather the referencing of characters played by that actor. And the last form of advertisement is the self-referential advertising text, an approach that alludes to other advertisements (Hitchon & Jura 1997, pp.147-155).

combining what has come before. The difficulty of producing a creative postmodernist advertisement involves a precarious balancing act, one that to attract attention and engagement must produce a novel association by tweaking past representations and styles rather than wholesale, and thus predictable, reproduction of what has come before with only minor variation.

It is useful to note that imitation may not always be the result of a purposive action,²² as is often the case with the parody or pastiche of postmodern advertising, and may instead be an outcome of how art directors or copywriters access information when seeking to produce a novel association in the modernist sense. A key point of investigation for this dissertation is whether search engines have the capacity to encourage unconscious plagiarism or 'cryptomnesia', the act of forgetting the source of an idea (Perfect & Stark 2008). A possible cause of unconscious plagiarism is increased exposure to other advertisements that has resulted from media convergence. Part of the skill of creative advertising is being aware of existing approaches but also forgetting them during the process creating a novel outcome. Practitioner and author Luke Sullivan speaks to this point by writing that art directors and copywriters should 'admire good work that others do but then promptly forget it' (cited in Griffin & Morrison 2010, p. 5). 'Good work' informs practitioners of how templates or patterns can be successfully varied; however not being able to forget these exemplars may result in replication. What can often be forgotten is the authorship of an idea, the practitioner may not realise that an idea they believe they have developed was actually the basis of an existing advertisement that they have previously been exposed to. Chapter Seven picks up on this point by considering whether unconscious plagiarism is intensified by pre-emptive search engines that prioritise particular sources of inspiration, such as advertising and design blogs, on the basis of knowledge of the user.

²² In some instances, imitation may be a pragmatic response to time limits or client requests. For instance, art directors or copywriters may use YouTube to show other advertisements to clients as references, in contrast to the previous period in which sketches were offered. The danger here is that the client will gravitate to the previous object and ignore a new variation. If clients are commonly risk averse, as suggested by numerous creatives (Morrison 2014; Ashley & Oliver 2010; Hogg & Scoggins 2001), they will gravitate to the known and seek to limit any new association.

4.3 Conclusion

Well before the rise of the network society, Mihaly Csikszentmihalyi noted the importance of investigating how the 'structuring of information' affects creativity (1988, p. 336). He noted with impressive prescience that artificial intelligence will have much to contribute to answering this question. This chapter has established that research materials are a significant influence on the creative process and thus provide a foundation for considering how increasingly autonomous software programs influence the practice of art directors and copywriters. The examination of stage-based models of the creative process that focus on individual actions revealed the cognitive tasks involved in ideation, including processes of association, and oscillation between conscious and unconscious thinking processes. The systems model highlighted the influence of relationships between creator, field and domain. Importantly for this study, the domain was identified as a way for practitioners to understand the cultural literacy of their audiences and to act as a repository of texts that can be sampled and shaped into new advertising messages. Both suggest that creativity involves to some degree an associative process based on the collection of cultural representations. Advertising has always responded to the social context in which it is created; however the dominant postmodern approach to message decoding and construction intensifies the conscious action of drawing texts from the domain, an action that involves the application of online sources of inspiration and the use of adaptive search engines, such as Google, to locate them. There can be little doubt that search engines with intelligent agent capabilities, as exemplified by Google search, make it easier and more convenient for art directors and copywriters to access research materials. But what is left behind in this shift in practice? Alongside the benefits that result from the application of adaptive search engines in the creative process, the less obvious losses that can occur also need be considered. In the following chapters these questions will be taken up through interviews with a group of Australian advertising practitioners. Chapter Five sets out the research design and method for this empirical phase of the research and Chapter Six presents the qualitative analysis of the interview data.

Chapter Five

EMPIRICAL RESEARCH DESIGN

5.1 Introduction

The methodology employed by this thesis is an integrated examination of theory and practice. As discussed in the introduction, neither theoretical insights nor empirical data is 'privileged' as a source of new knowledge; both are analysed to shed light on different aspects of the research questions. Theoretical concepts relevant to the investigation of intelligent agents and creativity have been examined in Chapters Two, Three and Four. These concepts will be applied to the analysis of research data in Chapter Six and, in conjunction with key empirical findings, will be used again in Chapter Seven to discuss the implications of the phenomenon being investigated. This chapter discusses the research design employed to collect and analyse data on the everyday creative practice of participants and their use of online technologies, with a focus on Google search and its intelligent agent capabilities. Qualitative research was selected as the most suitable approach for the empirical component of this study, with one-on-one interviews conducted with eighteen Australian practitioners to collect discursive 'insider accounts' of their creative practice. The themes that emerged from analysis of the data collected are not presented as generalisable results but instead provide an understanding of the perceptions held by a group of participants on the use of new media technology in creative practice. In addition to explaining why qualitative research was selected, this chapter documents the approach taken to participant recruitment, research design, data gathering and data analysis and critical reflection on my role as researcher.

5.2 Use of qualitative analysis

Qualitative research was selected to investigate the influence of Google search on the creative process of a group of art directors and copywriters through the analysis of discursive 'insider accounts'. The

study does not seek to quantify the deployment of intelligent agents but instead examines practitioners' experiences of the creative process and the social context in which they occur. The creative process is, in part, a subjective phenomenon that lends itself to analysis based on detailed descriptions of perceptions and experience. Based on the systematic recording, collection and analysis of this data, a complex picture of the varied influences of software with intelligent agent capabilities on the creative process is presented in Chapter Six.

While participant accounts of individual and industry practices provided an apparently 'authentic' account, they cannot be taken as an unmediated 'truth'. It is acknowledged that participants may self-report selectively to present themselves in a favourable light (Atkinson, Delamont & Coffey 2004). According to Albert, responses to questions pertaining to professional practice commonly engender intense emotions including 'anguish, pride, anxiety, security sought and secured' (1998, p. 12). Rather than seeking to present each voice as a 'fact', collective inferences have been drawn from what has been presented as 'truth' by each respondent. Accordingly, participant accounts have been analysed as discursive artefacts, 'evidence' in the form of discourse (Buckingham 1993, p. 266).

5.3 Sampling approach

A non-probability sample of interview participants who currently work as advertising agency art directors or copywriters in Melbourne, Sydney and Brisbane was recruited using purposive and snowball selection approaches. Non-probability sampling, in which 'a sample is chosen from the population under study without following any mathematical guidelines related to probability' (Weerakkody 2009, p. 96) reflects this investigation's aim to explore the variety of practitioner engagement with intelligent agents rather than provide generalisable results. Purposive sampling accommodates the recruitment of participants who possess 'very specific and valuable insights into a research question or hypothesis under examination' (Weerakkody 2009, p. 99). With regard to this study, art directors and copywriters who specialise in the production of creative advertising were asked to provide a series of insider accounts of their creative process. Potential interview subjects

whose contact details had been made publicly available on the Australian advertising creativity blog www.bestads.com.au were emailed an invitation to take part in the study. In addition, a call for participants was posted on social media sites²³ followed predominantly by Australian advertising art directors and copywriters. A snowball approach, a recruitment technique in which participants are asked if they can recommend contemporaries with similar, very specific characteristics (Weerakkody 2009, p. 101), was used to further build the study sample.

5.4 Participants

A total of eighteen participants took part in the study. Participants were no longer recruited when sufficient data was collected to represent the 'breadth and depth' of the phenomenon being investigated and previously collected data could be confirmed and understood (Rudestam & Newton 2007, p. 108). Participants who were employed in New South Wales, Victoria and Queensland took part in the study. These locations were selected as the majority of Australia's advertising enterprise revenue (89 per cent according to 2011 statistics) is generated by advertising agencies located in these regions (Shulman 2011, p. 17) (Table 5.1). The majority of participants were located in Melbourne (seven); five were from Brisbane; four were based in Sydney; and two worked in both Sydney and Melbourne on a regular basis.

Study participants²⁴ ranged in age from 18 to 54 with the majority aged between 35 and 44 (Table 5.2). On average, study participants had 15.3 years of experience in the advertising industry. As such, the sample predominantly consisted of participants who were well established in their careers.

²³ www.facebook.com/youngbloodsnsw, www.facebook.com/vicyoungbloods and facebook.com/qldyoungbloods

²⁴ Participants have been given aliases to maintain their anonymity.

Table 5.1: Percentage of national advertising industry revenue (Shulman 2011, p. 17)

State or Territory	Percentage of National Revenue
New South Wales	50.4
Victoria	30.0
Queensland	8.6
South Australia	5.1
Western Australia	5.0
Tasmania	0.4
Northern Territory	0.2
Australian Capital Territory	0.2
TOTAL	100

Practitioners from small, medium and large advertising agencies were interviewed in addition to individuals working in hybrid advertising and design agencies. One participant worked in a very large agency with over 100 staff; seven participants worked in large advertising agencies with between 50 and 99 staff members; one worked in a medium-sized agency with between 20 and 49 staff members; and five worked in small agencies with between fewer than 20 staff members (Table 5.2). Four freelance practitioners, who were at the time working on a short-term contract basis at advertising agencies, were interviewed. This range of participants is reflective of the sector's diversity. The advertising industry is dominated by large and medium-sized agencies that commonly employ freelance practitioners to deal with 'overflow', work that exceeds the capacity of on-going staff.

More men than women took part in the study. This profile reflects a broader advertising industry condition in Western advertising which tends to either attract or recruit a greater number of male art directors and copywriters (Spurgeon 2008; Powell 2011). It was observed that more male than female copywriters had posted their contact details on the industry blog used by this study to locate suitable participants and this was reflected in the final sample (Table 5.2). In addition, the

Table 5.2: Participant characteristics

Name	Age	Gender	Employer category	Specialisation	Agency size - staff no.	Experience (years)	Position	Location
Andy	25–34	M	Freelance practitioner	Big idea	N/A	9	Senior copywriter	MEL/SYD
Jeremy	35–44	M	Advertising agency	Digital	50–99	13	Digital art director	MEL
Drew	35–44	M	Advertising agency	Digital	1–19	17	Digital art director	MEL
Hannah	18–24	F	Freelance practitioner	Big idea	N/A	4	Mid-weight art director	MEL
Steve	35–44	M	Advertising agency	Big idea	1–19	17	Senior art director	BNE
Peter	35–44	M	Advertising/design agency	Big idea	1–19	15	CD & art director	MEL
Xavier	25–34	M	Advertising agency	Big idea	50–99	5	Mid-weight copywriter	SYD
Miles	35–44	M	Advertising agency	Big idea	50–99	13	Senior art director	SYD
Phillip	45–54	M	Advertising agency	Big idea	1–19	30	CD & copywriter	BNE
Vicky	45–54	F	Advertising agency	Fashion	100+	26	Senior art director	MEL
Emily	35–44	F	Advertising agency	Big idea	20–49	12	Senior copywriter	MEL
Geoffrey	35–44	M	Advertising/design agency	Fashion	1–19	27	Senior art director	MEL
Ian	35–44	M	Freelance practitioner	Big idea	N/A	24	CD & copywriter	BNE
Oliver	35–44	M	Advertising agency	Big idea	50–99	9	Senior art director	SYD
Jack	25–34	M	Advertising agency	Big idea	50–99	4	Mid-weight copywriter	SYD
Andrea	35–44	F	Freelance practitioner	Fashion	N/A	15	Senior art director	MEL/SYD
Luke	35–44	M	Advertising agency	Digital	50–99	15	Digital art director	BNE
Jace	35–44	M	Advertising agency	Big idea	50–99	21	Senior art director	BNE

contact details for male rather than female practitioners were predominantly provided when participants were asked to recommend other contemporaries who might be suitable for the study.

Participants offered a number of descriptors when asked to identify their job title. These ranged from titles specific to the advertising industry, such as junior, mid-weight and senior copywriter, to

position names that reflected a particular specialism, for example digital art director. The term 'creative', an industry term that is used to collectively describe art directors and copywriters, was offered by two participants as their title. To avoid any confusion resulting from the use of the term creative as a job title in the presentation of findings, titles based on the backgrounds of these participants were employed. For instance, rather than calling a participant 'creative Miles', this practitioner's title was modified in keeping with his professional background and experience to 'senior art director Miles'. Some practitioners who fulfilled a dual agency role of creative director and either art director or copywriter were included in the study as these participants confirmed that they regularly worked on the production of creative advertising in addition to managing creative teams.

Participants were categorised as working within one of three creative advertising genres or specialisms: 'big idea', 'fashion' or 'digital'. These groupings emerged as a result of analysis of practitioner descriptions of their work outputs and client base. The term 'big idea advertising' was commonly used by participants to describe advertising with the capacity to 'break the space' or 'push boundaries' for clients in sectors including fast moving consumer goods, motor vehicles, and finance and insurance. Accordingly, the category of 'big idea' practitioner was employed. Participants who predominantly worked for clients in the fashion industry or focused on digital communication were categorised accordingly. These are not the only specialisms within the field of creative advertising however the three categories reflect distinctions voiced by participants themselves. Variations between each category with regard to perceptions of creativity and software use emerged due to the disparate nature of the work processes of each group. Fashion creatives said they often have shorter timelines with which to complete campaigns due to the seasonal and transitory qualities of their clients' products. In contrast, digital creatives were prone to focus on the application of new media platforms that complement projects that are concurrently being developed by non-digital teams within an agency or create digital-only campaigns that are not integrated with traditional advertising campaigns. Those participants who reflected characteristics of the 'big idea' participant group placed their emphasis on the construction of novel messages that were capable of connecting with audiences on an emotional level.

5.5 Research instrument

Semi-structured, in-depth, one-on-one interviews were selected as the research instrument, as this exploratory study seeks to understand an emerging phenomenon. This interview style is typically used to collect individual experiences from study participants on a specific topic (Hennink, Hutter & Bailey 2011). For this study, in-depth interviews allowed data to be collected on perceptions of phenomena that cannot be directly observed or measured, such as decision-making processes. The use of semi-structured interviews allowed a rapport to build between the researcher and each participant and for discussion to arise naturally around key points of inquiry. This approach enabled questions to be asked in an 'open, empathic way' that was capable of 'motivating the interviewee to tell their story by probing' and thereby allowed for the reporting of a descriptive insider accounts of the topic being investigated (Hennink, Hutter & Bailey 2011, p. 109). The semi-structured interview format allowed questions to be varied to suit different participants and their circumstances while still covering the same conceptual ground, an approach that allows for comparisons to be made between the perceptions and experiences described. While the research model used by this thesis presents limitations that are inherent in conducting research into semi-conscious patterns and habits of technological use, it was deemed to be the most appropriate given the goal of studying a research object that has only recently been introduced into practice.

5.6 Interview questions

The topics covered in the semi-structured interview questions arose from the study's research questions. These are:

RQ1: What is gained and what is lost in the creative process of advertising art directors and copywriters due to their use of software with intelligent agent capabilities, such as Google search?

RQ2: Do the values embedded in Google search have an influence on the socio-cultural context in which creative advertising is produced?

RQ3: How does Google search, a software application capable of autonomously fulfilling its own goals, influence the creative process?

RQ4: Are art directors and copywriters aware of the implications of intelligent agent use on the creative process?

To provide data capable of answering these research questions, open-ended interview questions were developed that would encourage detailed responses across four dimensions of practice: creative process conditions, the collection of research material, search engine use and intelligent agent use. Participant responses to interview questions that sit in all four general dimensions of practice collectively contributed to my response to RQ1, the dissertation's overarching point of inquiry. An understanding of the creative process conditions contributed to my response to RQ2 and RQ3 by providing a snapshot of the everyday tasks of a group of contemporary practitioners, and thus presenting the context in which new media technologies are applied. A specific set of interview questions on search engine use further assisted my responses to RQ2 and RQ3 by teasing out practitioners' perceptions of their use of Google search and providing a means of evaluating its influence. Interview questions pertaining to the topic of intelligent agent use were directly related to RQ4.

The study predominantly included descriptive questions to collect the opinions, feelings and beliefs of participants 'in their own words' (Weerakkody 2009, p. 169). Four types of descriptive question were posed: 'task-related grand tour', 'experience', 'natural language' and 'structural' questions. Task-related grand tour questions required participants to reveal particular tasks, for example, descriptions of their creative process in response to receiving a brief from the advertiser. This approach allows the respondent to 'show' the interviewer how 'something is done' (Weerakkody 2009, p. 169). Experience questions required respondents to recall creative process actions or qualities. Natural language questions were posed to allow respondents to describe a concept in their own words and to feel comfortable when describing their working knowledge, rather than a technological understanding, of new media objects. Structural questions were asked to identify more

objective data, such as demographic information about respondents and which online technologies they use in the creative process (Weerakkody 2009, pp. 169–170). Two pilot interviews were conducted to evaluate the efficacy of the research questions in terms of phrasing, ordering and the ability of the data gathered to answer the study's research questions (Hennink, Hutter & Bailey 2011). Consideration of data gathered by pilot interviews resulted in the minor refinement of the final interview questions and their ordering. The final interview schedule contained 39 questions posed across five general dimensions of practice; 15 of these questions contained optional probing questions. The full list of interview questions can be found in Appendix 1.

5.7 Data collection

A total of eighteen audio-recorded interviews were conducted from October 2012 to March 2013 with each taking between 40 and 90 minutes to complete. Interviews were conducted on an individual basis with one exception, an interview with two advertising creatives and an agency managing director. This arrangement was made to accommodate the managing director of the agency, who revealed a desire to be present. The involvement of a non-creative practitioner in the interview process had a minor influence on the responses of the creative practitioners. To address this influence, the two creative practitioners were contacted via email with a series of additional questions to clarify points made in the initial interview.

I had anticipated that participants might be reluctant to discuss the creative process, due to a lack of reflection on practice as a result of the demands of the workplace, and might instead focus on descriptions of their creative outcomes. However, several participants who took part in this study said they were gratified that they could describe their work processes. In addition, participants commonly indicated they had not previously reflected on their approach to creative advertising production or the influence of new media technologies on the ideation process. Yet despite this enthusiasm, participants were observed to have trouble recalling specific creative process experiences, with some saying, for example, they could not remember how an idea for a recent creative project emerged. As a result, some experience-based questions yielded less data than expected.

5.8 Location of interviews

The setting of interviews is a significant framing device (Hansen et al. 1998), as it is important for participants to be comfortable with the location of the interview and free of work-related distractions. Accordingly, participants were invited to meet me in a reasonably quiet café or restaurant of their choice near their workplace. When this was not a practical option, interviews were conducted in a meeting room in the participant's office. The majority requested to meet in a café or restaurant.

5.9 Ethics

Ethics approval was granted by Monash University for this project. The explanatory statement, which was emailed to those who agreed to be in the study, informed participants they were under no obligation to participate in the study and were able to withdraw at any time from the research project. Participants were made aware that the information they provided would remain confidential and that no individual person, employer or client would be identified in the report. In addition, the explanatory statement noted that, in adherence to University regulations, collected data would be kept in a secure format and location for five years before being destroyed.

5.10 Analysis of collected data

To provide a consistent approach to the analysis of participant discourse, analysis of transcribed versions of audio-recorded interviews followed a three-stage process of data reduction, data display, and conclusion drawing and verification (Miles & Huberman 1994).

As part of the data reduction stage, information from transcripts was categorised into four dimensions of practice: perceptions of advertising creativity, perceptions of the creative process, use of Google in the creative process and awareness of intelligent agents. These categories were based on the structure of the interview to give the research findings a narrative logic. Topics that arose during interviews that both fell within these categories and responded to the study's key points of inquiry formed the basis of subcategories. Summarised versions of participants' perspectives and descriptions of experience were then organised within these categories and subcategories. From this point, codes

were developed from within the data using analytical induction (Bertrand & Hughes 2005) to allow a 'code and retrieve' approach to be employed.

The display stage involved the development of a spreadsheet matrix that presented coded data within analytical categories and subcategories in addition to a summary of the inferences drawn from this analysis. Confirmatory and contradictory cases, presented in the form of participant quotes, were also included in this document.

The final data analysis stage involved drawing conclusions on the basis of the theoretical insights and literature presented in the three background chapters. These conclusions were confirmed by returning to the interview transcripts to review the coding analysis and case selection. The development of these conclusions acknowledged the discursive status of the data as an analytical object; that is, conclusions were developed with an awareness that differences may exist between how respondents act in practice and how they talk about their actions (Bertrand & Hughes 2005).

5.11 Role of the researcher

As a former advertising copywriter, I took care to reflexively evaluate my own role in the research process. My background in advertising was not communicated to participants. This decision was made to allow participants to express their perspectives on the creative process and new media use to an 'outsider' who they believed might have limited knowledge of their creative practice as opposed to an 'insider' in possession of particular knowledge about agency or industry conditions. I was aware of the possibility of imposing my own experiences as a former practitioner onto those discussed by respondents. To minimise self-bias, interviews were designed to 'make the familiar strange' by posing questions on areas of professional practice that might otherwise have appeared self-evident (Burgess 1984, p. 19). In addition, the analysis and verification processes involved the development of evidence-based conclusions that were explicitly linked to the presentation of data (Miles & Huberman 1994). It is also important to note that my exploration of research data does not attempt to offer a purely objective analysis, because subjectivity is an unavoidable outcome of the interactions between

researcher and participant as they seek to achieve shared meaning. As a result, the analysis carries a mix of the participants' and my own perspectives (Weerrakkody 1996).

5.12 Conclusion

Qualitative research provided this dissertation with a robust means of gathering and interpreting the perceptions of a group of creative advertising practitioners regarding their creative process and use of software systems with intelligent agent capabilities. A non-probability, purposive approach to participant selection was appropriate given the study's aim to investigate a specific and unexplored area of professional practice. A systematic approach to data gathering, transcription and analysis provided a credible means of drawing a series of conclusions. In addition, the role of the researcher was carefully evaluated to reduce self-bias yet while still acknowledging that observation-based empirical research cannot provide a purely objective evaluation of the phenomenon being studied. While based on just one approach to data collection, this study's conclusions have provided an evidence-based foundation for the discussion of the influence of intelligent agent use on the creative process of advertising art directors and copywriters that will take place in the next chapter.

Chapter Six

PRACTITIONER ACCOUNTS OF

ADVERTISING CREATIVITY AND INTELLIGENT AGENT USE

6.1 Introduction

This chapter investigates how art directors and copywriters perceive the creative process and their use of technologies, in particular Google search, for everyday tasks. Analysis of the collected data responds to the theoretical constructs presented in Chapters Two, Three and Four, which conceptualised Google search as a form of intelligent agency, considered the industry context in which creative advertising is produced and examined the creative process as both an individually and a socially determined series of actions. Themes drawn from analysis are divided into four dimensions of practice to develop a reporting narrative, which are presented in four sections in this chapter (Table 6.1). The first section documents participants' perceptions of creativity in a general sense to provide an understanding of the particularities of advertising creativity and explore how practitioners differentiate it from other forms of advertising. The second section examines specific actions within the creative process to consider whether participant actions are consistent with existing theoretical models and to identify those tasks that may be influenced by the application of Google search. The third section analyses participants' reflection on their use of Google search to consider the influence of this emergent form of intelligent agency on the creative process. The last section reports on participants' awareness of the concept of intelligent agents to establish whether these technologies are actually acknowledged in the workplace.

6.2 Participant perceptions of advertising creativity

An understanding of how participants perceive the general structure of advertising practice provides a foundation for the investigation of the influence of a widely used form of intelligent agency, Google

search, on the creative process. Three themes have been developed using Csikszentmihalyi's systems model of creativity. As discussed in Chapter Four, this model considers creativity to be an outcome of three components: a creator who develops an idea; the domain or symbolic system of the greater culture that provides the information required to develop an idea; and the field, which consists of individuals and groups who affect and can be affected by the structure of the domain (Csikszentmihalyi 1988). The three themes discussed in this section establish the similarities and differences between creative advertising and other forms of creativity, highlight the influences of field and domain systems on the creative process, and reveal the consistent participant perception that creative advertising is more difficult to achieve than conventional advertising.

Table 6.1: Empirical research findings

Dimension of practice	Theme
Participant perceptions of advertising creativity	<ul style="list-style-type: none"> Advertising creativity contains both novel and appropriate elements Creative advertising emphasises the role of the audience Creative advertising is difficult to produce
Participant descriptions of the creative process tasks	<ul style="list-style-type: none"> The creative process involves loosely structured individual and team actions Participants have a large amount of control over their own work processes The time allocated to the creative process actions is decreasing The value of time for deliberation and refinement was emphasised Advertising specialisms influence participants' online technology use Exposure to large and varied research sources is desirable
Perceptions of Google use in the creative process	<ul style="list-style-type: none"> Google search is used as a research tool and to develop new associations Search engines are perceived to hinder the creative process Recreational use of Google influences work-related ideation Senior creatives believe their less experienced colleagues rely heavily on online media technologies Participants possess an incomplete understanding of how Google functions
Awareness of the intelligent agents and perceptions of their influence	<ul style="list-style-type: none"> The intelligent agent concept is largely unknown Participants offered negative and ambivalent perceptions of intelligent agents

6.2.1 Advertising creativity is commonly perceived as containing both novel and appropriate elements

Analysis of descriptions of advertising creativity suggests the majority of participants perceive creativity as both a process and an outcome that exhibits the qualities of novelty and appropriateness, which agrees with research in the field of creativity (Amabile 1982; Hennessy & Amabile 1988; Runco & Charles 1992; Amabile 1996; Pope 2005). These qualities have also been used to describe creativity in an advertising context (Haberland & Dacin 1992; Ang & Low 2000; Stone, Besser & Lewis 2000; Pieters, Warlop & Wedel 2002; Koslow, Sasser & Riordan 2003). Writing about the general features of creativity, Sawyer states that novelty or originality is the most basic requirement of a creative thought or action (2012, p. 7). In the context of creative advertising, high value is placed on the ability of an advisement to be novel, in order to attract the attention of audiences (Kover 1995; Drewniany & Jewler 2008; West, Kover & Caruana 2008). The quality of appropriateness implies that for an object to be creative it must have value or usefulness. For advertising creativity, this translates to an adherence to a series of task constraints that has been set by the field system, the client and agency account managers.

Many participants in this study shared the predominant scholarly understanding of creativity as being a combination of novel and task appropriate elements:

I think it's the ability to purely just think differently about a product or brand and combining that with a commercial need, to solve a business problem. I see our job as creatives to put a different spin on a business problem and try and get people to pay attention. [Senior art director Steve]

(Advertising creativity) is creating something from nothing and it's through much thought and consideration and research (that you) derive something that is basically individual, unique and effective in (terms of) what the actual end goal is. Creativity is the process of ingenuity or complex thought. [Digital art director Drew]

These perspectives confirm the importance of the field – the advertising industry – in defining creative practice, however they differ in that the second response assumes an intuitive, romantic conception of creativity, while the first focuses on task-effectiveness. As such, the first perspective ignores the influence of the domain, the cultural repository of research materials that are shaped into a new idea.

Participants commonly described the importance of novelty both as an action and an outcome. The phrases 'irregular thinking', 'thinking outside the box' and 'adding imagination' were used by various participants to describe novelty in a process context, while descriptors such as 'unexpected', 'surprising', 'subversive' and 'new' were offered to describe the creative outcome. It was also common for participants to describe the importance of 'solving a business problem' or 'meeting a client's goal' – a form of task-appropriateness that is shaped by influences beyond the creative's direct control, such as the client or agency account managers. The emphasis placed on the influence of these actors, who are part of the field system, reveals that advertising creativity is understood to possess different qualities to those of the fine arts, in particular in the extrinsic goal of persuading or changing behaviour (West, Kover & Caruana 2008, p. 35). Senior art director Miles specifically addressed the difference between the two paradigms by describing creative advertising as 'not art but artful'. This description suggests that while a creative team may apply artistic styling to an advertisement this work is ultimately shaped by commercial rather than artistic imperatives.

A small number of participants did not discuss the commercial context in which creative advertising is produced and instead offered descriptions of creativity that focused solely on their own actions. For instance:

I see normal everyday (thinking) as being on a path ... and I suppose creativity is when you go off that path a little bit. And I think the more creative people (are), the more they go off the path ... and create new little paths. [Mid-weight art director Hannah]

Hannah's pathway metaphor is indicative of participant descriptions that align advertising creativity with the action of 'thinking differently'. These perceptions indicate the shared desire to diverge from convention or established pathways during the creative process to create 'new little paths', and as such reflect the scholarly interpretations of advertising creativity discussed in Chapter Three that focus on the quality of divergence. However Hannah's lack of discussion of commercial influences suggests a romantic, individualistic view of creativity that is largely guided by internal constraints. Only one other participant also provided a creator-centric view of creativity: creative director and copywriter Phillip suggested that advertising creativity was largely the result of the creator's 'intuition'.

This theme within the participant responses demonstrated the importance of balancing novelty and appropriateness, and by extension the relationship between the individual action and the field. Rather than perceiving advertising creativity as a mystical or intuitive act or outcome, the majority described this phenomenon as a form of problem solving that is shaped by external constraints. This conceptualisation highlights a key difference between advertising creativity and other forms of creative practice, as the former always operates in terms of an external demand, the client's brief, which precedes the production of the work.

6.2.2 Creative advertising commonly emphasises the role of the audience

The majority of participants discussed the influence of the audience on their work by articulating a desire to 'understand' or 'connect' with a target audience. Rather than suggesting that they look for particular media content for inspiration, practitioners commonly stated that it was the audience that provides information for their ideation process.²⁵ Participants did not discuss the process of imagining conversations with audience members, a finding that emerged from Kover's (1995) study of the creative process of copywriters, however a desire to empathise with an idealised receiver, the implied reader or audience, was noted. An understanding of consumer behaviour was commonly perceived as a vital means of achieving a prescribed goal:

In advertising I feel creativity is being able to sit in the shoes of your market and come up with a concept and appeal to them and ultimately sell somebody's product. [Senior art director Geoffrey]

In addition to understanding an audience, participants mentioned the desire to 'engage', 'connect', and 'resonate with' an audience to achieve a prescribed goal. For instance: 'What I'm looking for is to make relevant connections that resonate with people, (something that) emotionally affects them and persuades them to do something' [Creative director and senior copywriter Ian]. The following statement offers an example of the way in which art directors and copywriters engage with an audience:

²⁵ However when questioned later these participants did indicate particular types of media as forms of inspiration.

My quest is for truth and that's what I'm constantly looking for, I think if you find a truth that hasn't been told before you don't have to worry about the originality, it's (already) original, people are going to connect with it. [Senior art director Miles]

For Miles, audiences connect to 'truths' that have not been presented to them before. Other participants described similar means of developing a connection with an audience as the identification and communication of 'human truths' or 'consumer insights', terms that can be understood as social or behavioural factors that are accepted as being self-evident.

This theme further indicates that participants adhere to an industry-specific understanding of creativity, one that reflects the concept of the novelty–appropriateness nexus yet places an emphasis on the audience rather than the self-expression of the creator. In addition, this theme indicates that information about audiences is not necessarily drawn from existing knowledge and experience but must be collected on a task-specific basis in response to different briefs.

6.2.3 Creative advertising was generally considered to be more difficult to produce

Just under half of the study's participants stressed the high degree of difficulty involved in the production of creative advertising. When questioned further, participants commonly explained that the large amount of advertising produced makes the production of novel variations more difficult to achieve.

I think every true creative strives to be original. I don't often think that's possible because I think there's a finite way to show something ... unless it's a new product. [Senior art director Andrea]

It's really hard because everything's been communicated. There's so many things have been done, so many ad scripts have been written, so many campaigns have been done, it's hard to come up with a new thing. [Senior art director Oliver]

Andrea's response highlights a perceived tension between the industry expectation that creative advertising should be original and the belief that there is a limit to the number of novel variations that can be produced by practitioners when a product itself does not exhibit an inherent form of difference. Oliver offered a similar perspective but is more explicit in his reasoning. He considers the saturated environment of media production, one that has in the past and continues to produce an immense amount of messaging, as a barrier to novel outcomes. Other participants stated that it was common for

a creative team to discover that another advertiser had already produced their 'new' idea. For another participant, existing advertisements and media content were a problematic influence when new ideas were not forthcoming.

I think it's hard to come up with original ideas (even though) it's every creative's ambition to do it ... I think it's hard, you get a brief, you're working on stuff, trying to think of ideas, you can't think of any good ideas, and whether it's consciously or subconsciously you are influenced by things that you've seen whether it's another ad or whether it's something else. [Mid-weight copywriter Xavier]

For Xavier, the ability of existing advertisements and other media content to fill the void when novel ideas could not be developed presents the most significant barrier to originality. He notes that this can be the outcome of not only exposure to media content but also unconscious plagiarism or cryptomnesia, a concept with a burgeoning relationship to adaptive new media technologies, discussed in Chapter Four. Mid-weight copywriter Jack said the production of what is at first considered to be a new creative concept but turns out to be an idea that already exists is a result of coincidence:

If you do come up with a campaign that's similar then it's coincidental and I have done that in the past where I've presented an idea that I don't ever remember seeing before and someone says 'it's been done before', and yeah they were able to show me it ... you're bound to do stuff that's been done before, you're bound to. [Mid-weight copywriter Jack]

Collectively these perspectives provide further insight into the domain in which art directors and copywriters operate. The belief that new ideas were more difficult to achieve because most new ideas had 'already been done' emerged as a key reason why creative advertising is so highly valued. This condition was compounded by the large amount of advertising material that was produced by the industry, with some participants stating that continued exposure to advertising material increased the likelihood of unconscious imitation. These observations, and in particular concerns over the influence of unconscious plagiarism, raise the question of whether constant exposure to a large amount of advertisements and other media content makes it difficult for art directors or copywriters to remember the source of an idea.

The three themes discussed in this section provide a snapshot of how a group of contemporary Australian art directors and copywriters perceive the concept of advertising creativity. The themes reveal that while creative advertising fits the novelty–appropriateness conceptualisation, there are

contextual factors that present art directors and copywriters with distinctive challenges in achieving creative outcomes. Participant discussion of advertising creativity in a general sense also highlighted the influence of the domain, the repository of cultural representations that are used to help creatives understand and connect with audiences. From this foundation, the following analysis of practitioner descriptions of specific creative process tasks and online technology can be developed.

6.3 Participant descriptions of creative process tasks

This section identifies the everyday creative process actions described by participants and the social context in which they are completed. Six themes emerged from analysis of the data. These themes were predominantly analysed using the Wallas stage-based model of creativity (Lubart 2001). Its four stages are: *preparation*: task investigation and research; *incubation*: periods of subconscious thinking; *illumination*: the moment when the idea reveals itself; and *verification*: evaluation and final shaping of an idea (Pope 2005, p. 73). As mentioned in Chapter Four, this model provides the basis for Young's five-stage model for advertising creativity. The key difference is the separation of Wallas' preparation stage into two discrete periods of immersion, one in which 'raw materials' are gathered, followed by a digestion stage of conscious association making (Young 2003) (Table 6.2). In addition, the systems model of creativity (Csikszentmihalyi 1988) will be used to consider the social and cultural context in which practitioners operate.

Table 6.2: Comparison of Wallas and Young models of the creative process

Wallas model (Lubart 2001)	Young model (2003)
Preparation	Immersion
	Digestion
Incubation	Incubation
Illumination	Illumination
Verification	Verification

6.3.1 The creative process involves loosely structured individual and team actions

The majority of participants said they regularly worked as part of a 'creative team' consisting of an art director and copywriter. However, that is not to say that all tasks are completed as a team, as the creative process was predominantly described as an ad hoc and loosely structured movement between individual and team actions rather than a rigidly habitual or standardised process.

My partner and I go into a room and we just talk, we don't necessarily talk about the brief, we just talk to each other. And then maybe we look at the brief ... I'm a really big believer in working really intensely and then I go away and look at something on the Internet. [Senior copywriter Emily]

When I do follow a routine, I'll get the brief and I'll just try and read it over and over again until I understand it ... typically I'll write a lot of ideas down on paper, sometimes if I'm trying something different I might not do that. I'll just speak (the ideas out loud) or try to think visually about them or talk to the art director (and) bounce ideas off him. [Mid-weight copywriter Jack]

That first stage is really brain dumping I suppose ... it's discussing it out (sic) and kind of teasing it out and discussing some of the options to start with ... You have a break, go and get a cup of coffee or something and then you usually change gears, think of your own ideas for a while and come back to (team work). [Mid-weight art director Xavier]

As was the case with the majority of participants, Emily, Jack and Xavier focused on the stages of preparation and incubation. The above statements suggest the application of Osborn's brainstorming model (1953) in which judgement is withheld to encourage the development of a large number of ideas. However, descriptions of this practice differ from the Osborn approach due to a lack of a strict two-step structure, with participants often describing 'short bursts' of collaboration that occur spontaneously and are interspersed with individual actions. My data indicates that stage-based models are not strictly adhered to in practice. For example, the moment of illumination was rarely mentioned, an exception being this comment by Vicky:

I never stop looking for creative inspiration. I live, eat, breathe keeping my eyes and ears open. I often have an idea when I'm in the shower, when I'm falling asleep at night, I'm driving to work, it's often when I'm not trying to come up with the idea that I do get the better idea. The second way I (develop ideas) is to get together with my team and workshop it. [Senior art director Vicky]

This statement further reinforces the ad hoc and loosely structured nature of participation in the creative process.

While participants' perceptions of the creative process commonly focused on the production of new associations resulting from art director and copywriter interaction, the existence of a verification

phase was suggested by participant responses to questions on their use of Google search. For instance, the search engine was described as being used to perform a 'Google check' to verify the originality of a new idea. This involved placing key terms that describe a creative concept into the search engine to determine if the idea had already been applied in an existing advertisement, and thus attempting to avoid unconscious plagiarism.

This theme suggests that rather than being a rigidly formulaic series of actions that involves either exclusively individual or collaborative tasks, the creative process of participants is looser and more ad hoc than suggested by stage-based models. The Wallas model and its derivative, Young's advertising focused paradigm, present the creative process as a sequential series of steps. Participants did not voluntarily mention their own research actions, a prominent phase of Young's model; this suggests that research is not 'top of mind' for participants when reflecting on the creative process. It should be noted that respondents generally provided only brief descriptions when asked to describe their creative process, an unexpected finding given the central role of these actions in their everyday lives. This indicates that for the majority of participants the creative process is habitual and internalised, rather than the result of a reflective practice.

6.3.2 Participants have a large amount of control over their own work processes

With regard to the actions that take place prior to the presentation of creative concepts to a client, participants predominantly said they had a large amount of control over their own work processes and operated in a 'flexible' environment. Senior copywriter Emily, for example, explained: 'There's nobody telling me what I've got to do what I do, I've just got to come up with the goods.' Some participants said this degree of control was qualified by the influence of the budget for the creative process, which determines the amount of time that can be spent on a project. Digital art director Drew, for example, said: 'I don't generally have a lot of parameters. Obviously a budget will ... impact on an outcome, that's one of the biggest.' It is useful to reinforce that this perceived lack of parameters refers to the period before an advertisement is presented to the client, as adapting an advertisement to accommodate client changes was not perceived to be a creative process action.

Participants discussed the beneficial nature of ‘flexibility’ in terms of their creative practices and working hours. The concept of being granted the ‘freedom to fail’ was discussed by senior art director Jace – the notion that he is provided with the agency to explore a creative concept that breaks convention to the extent that it may not necessarily provide a usable outcome. This reflects conclusions made in relation to US agency environments on the positive nature of agency environments that accommodate risk-taking (Ensor, Cottam & Band 2001; Ashley & Oliver 2010). Creative director and art director Peter discussed the value of staff being allowed to work on individually determined creative projects that did not present a direct financial gain for the agency but have the capacity to build creative prowess. Flexible working hours and locations were perceived as an industry norm by digital art director Jeremy, who stated: ‘At every agency I’ve ever worked at creatives have been allowed to work at home or wherever else they want to.’ All of these statements suggest the existence of an institutionally recognised principle that art directors and copywriters are permitted to determine their own approach to everyday tasks within time-based and other brief-specific constraints. This finding further reinforces the loose and ad hoc nature of creative process actions described in the previous theme.

6.3.3 Participants generally perceived that the amount of time allocated for the creative process is decreasing

Participants stated that the time allocated for the creative process is decreasing due to a series of reasons. The most common of these was a perceived decline in advertising budgets.

We’ve got a lot less time. (Whether) it’s money or it’s time, clients want to spend less. [Mid-weight art director Hannah]

More and more these days it’s ... about budget. In the old days people would quite happily spend \$150,000, \$200,000 on a TVC, but there has been a big shift in technology and the economic climate has reduced that significantly. And unfortunately that generally means that (practitioners) have to work a lot faster. [Digital art director Drew]

Other participants focused on the effect of technological innovation on client perceptions of creative advertising production.

Oh yeah, I think there has been definitely an increased expectation that things happen quickly ... I think there's no understanding that there is a creative process that happens before something gets put into a computer that can be quickly outputted ... technology has driven a sense that things happen more quickly than they do. [Creative director and copywriter Phillip]

A similar sentiment was offered by senior art director Oliver who stated that while shorter deadlines were the 'spirit of the times', technological innovation had led clients to believe that because an advertisement can be laid out in 10 minutes, 'creativity must be quick as well'. In a similar vein, senior copywriter Andy believed that advances in design software resulted in a 'slightly skewed perception of how long things take' for his clients. This observation indicates an unintended outcome of the movement of new media technologies into advertising production. Oliver's comments suggest that a time compression driven by the automation of repetitive ICT tasks, such as those involved in laying out a creative concept, has transformed more general perceptions of non-repetitive tasks, such as ideation. This is intensified by client expectations that ICTs remove the 'burden of having to wait' (Simpson 1995, p. 23) across all areas of advertising practice.

Other participants said that new technologies had altered their creative process time use by allowing them to produce draft advertisements (indicative layouts developed solely for client approval) with a high degree of 'finish'.

There's just a level of finish now that takes a long time, I've just noticed now campaigns are getting more and more polished at idea level which is just really frustrating in a lot of ways because you spend a lot of time actually putting (a layout) together rather than thinking. [Senior art director Miles]

At my last agency we had a culture of presenting work at very highly finished (level) before we'd even made it, whereas the model used to be the black marker pen on a white piece of paper ... You end up setting benchmarks but those benchmarks become the new norms and now I've found that everything needs to be presented at such a high level, it's exhausting. Whereas once you would concentrate on the idea. [Senior copywriter Andy]

These statements reveal a concern that the time spent developing a still prospective advertisement for presentation to a client is at the expense of creative process tasks. Both Miles and Andy indicated that this time would be better spent on concept development or refinement.

In summary, economic conditions and technological innovation were commonly perceived as shaping client and employer expectations of how long it takes to produce creative advertising. Accordingly, this theme suggests a collective belief that aspects of the creative process, such as periods

of deliberation and refinement, are being squeezed. In effect, this finding reveals how changes initiated by the field are condensing the creative process stages identified by the Wallas/Young models.

6.3.4 The value of time for deliberation and refinement was emphasised

Mixed opinions emerged over the optimum timeframe for the completion of a creative project. Some participants reported that short deadlines create an impetus to begin and continue working on a creative brief (that is, a means of getting started early), while others believed that short deadlines had negative consequences, including a reduction in the time that could be spent on idea reflection or refinement. Participants also discussed the unpredictable nature of the creative process, specifically with regard to the illumination stage – the point at which a new idea becomes apparent to the practitioner. These findings indicate that while the desired timeframe for completing a creative project is subjective due to the capriciousness of illumination, there is an awareness that overly short deadlines result in a loss of time for the verification stage, which includes reflection and refinement actions.

The majority of participants who discussed deadlines indicated a preference for what was generally described as a ‘short deadline’, a period of time that was variously described as two hours, two days or a week. The rationale that an impending deadline produced pressure to act was commonly offered:

A bit of pressure really helps. We whinge about it; we whinge when we’re given two days to do something but sometimes it really helps you become focused. If we get two weeks to do something we won’t do it two weeks before (a deadline), there’s not the impetus. [Senior copywriter Emily]

It really varies, more time is good, but I’m one of those people (who) work well under pressure. With too much time I’m idle and I go spend a whole day on the Internet. [Mid-weight copywriter Xavier]

Other participants said having ‘too much’ time resulted in excessive and therefore unproductive periods of deliberation.

Time is more part of the process in keeping the process going. If you get bogged down and start thinking, thinking, thinking without committing something I think the creative process loses steam. So it’s better to be putting some ideas out there even if ... you look back and say, ‘shit, that one’s all over the mark’, it still gives impetus to the process. [Creative director and copywriter Phillip]

This perspective was also offered by senior copywriter Andy, who provided the example of being given six weeks to complete a project; a period he considered as excessive and, as a result, made him 'go crazy' because he had too much time to 'second guess' his work. Many commented that it was hard to predict how long it would take to reach the moment of illumination. For example:

Sometimes the adrenaline of a short deadline (helps). Our (sportswear apparel brand) pitch idea was something we basically came up with in 10 minutes. We were given a brief and we had to do this thing and we went like that [slams hands on table] and did it. Sometimes you get a really good idea to begin with, more often than not you don't. [Mid-weight copywriter Xavier]

This suggests the difficulty for these practitioners of conforming to a standardised routine, a condition that reflects Bengtson's criticism of the Young model's 'assembly line' of advertising creativity (1982, p. 6). It is important to acknowledge that although the stages discussed by Young are present, they do not manifest in a rigid and sequential order.

Other participants paid more attention to the detrimental effects of having short deadlines, a direct influence of the field, imposed on their creative process. Their concerns predominantly revolved around a lack of periods of deliberation and refinement.

Lack of time tends to produce pedestrian thinking; first thoughts are usually familiar and accessible. It's only by pushing yourself further that you peel away the layers of ordinary and find the truly interesting, original ideas and insights. Time gives you the freedom to explore without fear. It lets you enjoy playing with the problem. Time gives you the luxury of giving your ideas 'the overnight test'. It's like seeing your own work through someone else's eyes. [Senior art director Jace]

Time gives you the ability to research something a lot more and refine, whereas if you have that taken away it hinders the result you may have, it's the difference between making something that's great and something that's award winning. [Digital art director Drew]

The following observation suggests that while short timeframes assist actions that sit within the incubation and illumination stages, aspects of the verification stage suffer the most from a reduction in the time allocated for the creative process.

I think you can come with ideas quickly but you need time to craft them, that's what really takes time. Give someone two days to come up with an idea and give them 20 days to make it perfect... if it's two days to think about it, two days to craft it ... it's never going to be as good. [Senior copywriter Emily]

In other words, while it may be possible to develop ideas quickly, a lack of subsequent deliberation is capable of diminishing the standard of the advertisement on many levels, including its ability to achieve a novel effect for the audience.

In summary, diverse opinions on the role of time in the creative process were offered. The dominant perspectives were that short deadlines keep practitioners ‘on track’ and, alternatively, that reduced timeframes are problematic because they limit the time that can be allocated to deliberation, reflection or idea refinement.

6.3.5 Advertising specialisms influence participants’ online technology use

This theme focuses broadly on the general use of online technologies; Google search and intelligent agents will be discussed in the next section. The majority of participants stated that online technologies were used for research, an action that was mentioned as occurring at any stage of the creative process but was most commonly described as taking place during the start. The term ‘research’ has been selected to describe participants’ exposure to three commonly described forms of predominantly online content: information on how a product is used, audience behaviours, and cultural representations drawn from the domain in which the creative operates. The term does not refer to externally developed market research findings or research undertaken by agency strategists, elements of which are commonly included in the creative brief. Two research approaches have been identified: task-specific research, which involves collecting information that relates to the participant’s current creative project; and on-going research, the gathering and storing of materials and sources for future use on an as-yet-unknown project.

While the identification of this theme highlights the importance of access to information, several complexities emerged with regard to when this action occurs during the creative process. Participants who worked within a particular specialism²⁶ were found to have similar perceptions of how online technologies are used for research purposes. The majority of participants in the ‘big idea’ specialism perceived task-specific research as something to be avoided until an idea had been formed, however some participants in this category claimed to use online technologies when an idea could not be

²⁶ Three creative advertising specialisms are represented in this study. They are ‘big idea’, ‘fashion’ and ‘digital’. The names of these genres are based on the descriptions of work processes offered by participants. The term ‘big idea advertising’ describes outputs which participants described as containing ideas that ‘break the space’ or ‘push boundaries’. Participants who described themselves as fashion creatives worked predominantly for retail fashion brands, while digital creatives specialised in the development of online advertising. These three genres are not an exhaustive list of creative advertising specialisms (see Chapter Four), but instead reflect the identifiable specialisms of the participants in this study.

developed or to refine an existing concept. This group saw research as being more effective when it was undertaken as an on-going action, that is, not in response to a particular brief but as a means of building their own knowledge and experience. This finding reflects Young's belief that advertising creatives should be continual 'browsers of information' (2003, pp. 35–36), and the suggestion that practitioners are 'magpies' who are continually collecting pieces of information (Burtenshaw, Mahon & Barfoot 2011, p. 91). However, analysis of responses from participants who specialised in fashion and digital advertising revealed a variation on this theme, with members of these groups commonly stating that they performed both task-specific information-gathering actions before an idea was formed and, in addition, on-going research to build their knowledge and experience.

Rather than using online technologies to complete task-specific research actions, the majority of practitioners in the big idea advertising specialism said they avoided exposure to online content until after an idea had been formed. Instead this group commonly stated a preference for using their existing knowledge and experience to develop new ideas, particularly at the start of the creative process.

I think for a creative you just sort of delve into your own experiences and stuff, which is just thinking about it really. I think researching can be useful at different stages, I find that I like to do all of my thinking to begin with and then come to a dead end and then research only later on. [Mid-weight copywriter Xavier]

At first I like to draw on the things I've personally observed or been inspired by in the past. Obviously I'm also inspired by the information in the brief. After I've exhausted all of that, and sometimes that is all the deadline allows, I'll research the topic, usually on Google. [Senior art director Jace]

These statements underscore the high value placed on deliberation and a desire to avoid task-specific research until an idea is formed. However, research using online technologies was described as a common action when the knowledge and experience used to create new associations was exhausted or when the participant had 'come to a dead end'. This point is interesting because it demonstrates a faith in online searching, that it will get the job done but not necessarily with a sufficient degree of creativity. Various reasons were provided on why research should be avoided until an idea has been formed in the illumination phase of the Wallas model. The most common explanation was the belief that task-specific research using online technologies led to overly derivative outcomes.

If you specifically go looking for it you never quite find it or you get too derivative. [Senior copywriter Andy]

You get the same inspirations and the same visual feeds and the same facts as everybody else is getting. So if you visit this blog or the other blog, it essentially doesn't matter because the content is going to be the same. [Senior art director Oliver]

All these ads (recently) came out at once, it was like a giant person walking through the street, then it was a huge clock walking through the street, and then it was rabbits coming out of the ground in the street ... Everyone was probably watching these popular YouTubes going 'why don't we put that in Melbourne or Sydney?' and there was a massive trend for the same thing. [Mid-weight art director Hannah]

In these instances participants believed online research bypasses the process of deliberation, or the 'thinking through' of a concept. This indicates that these practitioners place greater value on ideas that have been inflected through internal processes compared with those which result from exposure to external sources of inspiration. For instance, the following participant saw the collection and reinterpretation of online content as being a 'lazy' approach to ideation:

A lot of creatives go straight to YouTube now and it's becoming extremely derivative and what I find is I can almost look at a film and see a moment ... and I'll go 'I set my clock (on) who's going to rip (it) off first' because it's there for the picking, it's just extremely lazy. [Senior art director Miles]

The recycling of what has come before rather than relying on knowledge and experience to develop a new idea was also described as a lapse of professional integrity:

I come from the school of advertising where ... it was almost unacceptable to be sitting at a desk going through an award book because you were not supposed to copy, you were supposed to be original. So I've never been one to go to those places for inspiration because it's not what I believe is the right creative process. [Creative director and copywriter Phillip]

A small group of big idea participants said that the deployment of online technologies to undertake research was a 'disruption' or 'distraction' to the creative process.

It's a misconception that (art directors and copywriters) can stare at the Internet for two hours and wait for inspiration. I think that's kind of wrong because on the one hand it's pretending to work and on the other it's just distraction and it always leads to a similar outcome. [Senior art director Oliver]

Yet despite this criticism, Oliver offered conflicting views of his online technology use. While he linked the perceived distraction presented by online technologies to both superficial 'busy-ness' and the creation of derivative work, at other points in his interview he described the use of online technology as a means of clearing his mind.

Maybe it's like eating ginger between sushi, it's like to clean your palette between courses and maybe I do that as well, I'm not actively seeking something but it's to blank your mind. [Senior art director Oliver]

Another big idea practitioner, senior copywriter Emily, also described the use of online technologies to relax or 'tune out' between other creative process tasks, an action that was described as sometimes allowing her to unconsciously develop new ideas.

Participants commonly mentioned idea evaluation and refinement actions, which sit in the verification stage of the Wallas model, when discussing their use of online technologies. Mid-weight copywriter Xavier described refinement as occurring when 'the ideas (are) there, it's just sort of colouring in'. This task was also discussed by senior art director Miles:

Refinement is so important. I can say to you grey, but there's millions of shades of grey and that's open to misinterpretation so (when) you get an idea you have to make it tangible, you have to make it sellable. To do that (I use) film and tangible references, things the client might not or things they might have seen before but we help paint that picture so we are constantly cutting mood reels and things like that but I think that it's important to emphasise that I don't show a YouTube clip and say 'that's it'. I say, 'see this character here, something like this could be interesting, some guy like this could be cool'. [Senior art director Miles]

Miles' perception indicates that online technologies are used predominantly to illustrate ideas and remove ambiguity to 'sell' a creative advertisement concept to a client. His discussion of references – both imagery and video are used as examples – emphasises that YouTube clips are used to support ideas rather than as an object for replication. However, the possibility exists that while an idea might have been formed independently of a YouTube video, the use of this content as an illustrative reference has the potential to fold back on the idea and reshape its final execution.

Despite the majority of big idea participants stating that they aimed to avoid media content until an idea had been formed, just under half of these participants said that research was valuable if undertaken as an on-going process. The following statements illustrate this perspective:

I find it better to use that stuff, whether they are blogs or humour websites, (when it is) not in relation to a task. I think it's better to have a healthy appetite for that stuff and it just bounces around and then you realise that you just end up picking and choosing it as you need it ... so I find it better to just keep active looking at things constantly and then it's there. [Senior copywriter Andy]

(I read) stuff that may not seem relevant but it really is, because someday somewhere you'll remember what you've read and you'll say to your partner 'I read this thing that it's really interesting that people do this, and then there's an idea in that'. So, you have to have a constant whirl and add to that. [Senior copywriter Emily]

I'm not a voracious reader but I'm curious about things, I store them away and know that they will be handy later. [Senior art director Jace]

Other participants described the process of on-going research as allowing them to be 'well rounded' or 'plugged in' to contemporary culture. Importantly, the value placed on on-going research suggests a preference for research material that is recalled by the practitioner rather than task-specific research that is fed into the creative process without subjective inflection. In terms of the type of information used by these participants, blog content emerged as the research source most commonly sought out via online technologies either on an on-going basis or when previous knowledge or experiences were exhausted. The types of blogs mentioned included advertising industry, design and photography sites. Other online platforms, including Google Images, newspaper websites, newsletters, YouTube, online forums, Twitter and product review sites, reflect the desire of participants to access a large number of sources of inspiration that expose them to cultural representations and examples of consumer behaviour.

Analysis of perceptions of online technology use by participants who predominantly produce fashion genre advertisements revealed a different perspective to that of the big idea creatives. Rather than stating a desire to avoid research until an idea had been formed, participants who specialised in fashion advertising highlighted the value of accessing online media content at the start of the creative process. Senior art director Geoffrey stated, 'I definitely go online and Google the hell out of the topic that I'm looking to do a creative concept about.' This step was then described as being followed by an editing process: 'I guess what I do then is sit down and let the onslaught of information that I've researched swirl around inside my head until I start to come up with ideas and I jot them down and start to explore them.' Senior art director Vicky, who also specialises in fashion genre advertising, explained that research was an on-going process, one in which she would 'never stop looking for creative inspiration'. During discussion of her creative process, Vicky contrasted her process with the actions of big idea practitioners: 'You know with what we do, we're not looking for big ideas as such, it's quite different to coming up with the big idea for the brand. It's more fast turnaround campaigns.' Unlike big idea practitioners, fashion advertising participants focused heavily on external factors.

Vicky explains, 'Because of the way the seasons work overseas what's coming through in Australia is generally just that tiny bit behind overseas ... I'm (working on future) summer (campaigns when) they are (already in) summer.' As the Australian fashion industry follows what has already occurred in the northern hemisphere, established seasonal trends form the basis for both the clothing and how it is portrayed in advertising. In effect, the fashion industry, a field system influence, can be described as heavily shaping the creative process of practitioners who work in this genre.

The three participants who specialised in the digital advertising genre described research using online technologies as a key aspect of their creative processes. Two of these digital creatives said they were research-focused to remain cognisant of technological innovations. According to Digital art director Drew, 'In many respects, the digital age is constantly changing the (creative) process because there are things that we've never done before and new ways of achieving that end product.' This statement indicates an emphasis on using the novelty of the medium rather than the message to attract attention, for instance a new feature available to app developers that an audience may not be familiar with. Task-specific research actions were described by Drew as taking place at various points of the creative process, as the following observation illustrates:

You know research can take place all the way along especially with technology. You might find a stumbling block along the way and have to research a solution, so research is an important ... concept (that) generally happens at the start and moves from there. [Digital art director Drew]

Digital art director Luke highlighted a focus on on-going research using online technologies by discussing his digital team's production and distribution of a weekly newsletter to colleagues on digital media innovation. This action enabled his creative team to continually be exposed to new forms of inspiration through both their own research and the research of others.

What you can do is watch the theories and the kind of ideas and then learn off those and then do your terrible half-cocked version of it, but at least you've been inspired ... And then hopefully three months down the line somebody will say 'yeah I remember that strange thing you showed us, I've now got a use for that technology'. And that's the creative process; we've planted seeds that then grow into something else. [Digital art director Luke]

As was the case with Drew, Luke's discussion of research tasks hints at a focus on technological platforms rather than message development. In contrast, digital art director Jeremy offered the following response when asked to describe his creative process:

So it's kind of going from a massive brainstorm to identifying ideas, stress testing against the client requirements and what the brief says and then moving into ... the process the actual consumer would take. Once you start doing that you start identifying what are the technical implications or what are technical things stopping you from working. [Digital art director Jeremy]

In this instance, very little emphasis is placed on technological innovation. Instead, an idea is developed and then how a consumer could be exposed to that idea via a new media platform is considered. In other words, technology is facilitating an already formed idea rather than shaping or constituting that idea.

In summary, perceptions of research actions during the creative process vary between participants according to their specialisation within creative advertising. Participants who specialise in the big idea genre of advertising communicated a desire to avoid external sources of inspiration until an idea had been formed or when existing knowledge and experience had been exhausted. A variation was noted with some big idea practitioners arguing that their research actions include the on-going collection and storage of sources of inspiration for later use. Those who specialise in the fashion genre stated a willingness to use online technologies both for research purposes at the start of the creative process and on an on-going basis, a condition that reflected the fast turnaround of fashion campaigns. Industry conditions also shaped the perceptions of participants who specialise in the digital advertising genre. Practitioners in this category commonly perceived the role of research, whether task specific or on-going, in terms of its ability to identify technological novelty that would subsequently be utilised. Overall the responses relating to this theme reveal that while differences exist in the research actions of participants specialising in discrete genres, exposure to online content, both on an on-going basis and in response to a brief, plays an important role in the creative process.

6.3.6 Exposure to large and varied research sources is desirable

Participants commonly discussed the benefits of being exposed to a large amount of research material, with more than half of the study's participants stating that their exposure to diverse forms of information on an on-going basis was an important creative process action. Participants also revealed a desire to avoid particular types of online content, such as advertising industry related sources, which were perceived to lead to overly derivative work.

Participants from all specialisms discussed the relationship between the ability to develop new ideas for advertisements and exposure to a large amount of information on various topics.

You have to be a curious person I think generally and you've got to furnish your mind with just stuff, loads and loads of stuff. [Senior art director Jace]

Everything in your mind is memory. I don't think I was born with creative ideas I think everything's been put in my head somewhere, somehow and the more movies, the more music, and the more things I can see and experience the more (ideas) I can get. [Mid-weight art director Hannah]

I try and read a lot; reading for me is a big inspiration thing. My (creative team) partner thinks I spend all day on the Internet but he doesn't quite understand that it is a really important part of my creativity to get in all this information, as much as I possibly can. It's just about weird stuff sometimes. [Senior copywriter Emily]

Participants did not mention an adherence to particular creative advertising narrative templates or patterns, as identified by Johar, Holbrook and Stern (2001), or the narrative structures of the Vanden Bergh and Stuhlfaut (2006) study. This is not surprising as these studies present a form of abstract reasoning that practitioners would be unlikely to articulate when reflecting on their work practices. In addition, these researchers argue that practitioners tacitly apply templates or patterns when developing novel advertisements. However, a desire to avoid adhering too closely to industry trends or formulas was noted by some participants:

I just try and stay outside the field of advertising because it gets incestuous ... If I work in it, I don't need to digest it all night, yeah. I'd rather read a science mag than I would a science manual. Not in a conceited way, I'm not that interested in reading about our industry; you don't hear much that you don't already know. [Senior copywriter Andy]

Advertising creativity can be a little bit of an echo chamber where some people just get inspired by ads and it's a circular thing. It's a very closed community or it can be. Whereas I think if you look for influences and stuff outside of other advertising you're probably going to (get) a mix of other things (and) you're probably not going to be repeating other ad concepts so much. [Mid-weight copywriter Xavier]

For Miles and Xavier, the field itself can act as an impediment to the achievement of novelty, with exposure to other advertisements encouraging the production of familiar rather than novel outputs. It is worth noting that the extent of this perspective may be limited given the amount of attention devoted to the critique of new advertising campaigns in industry publications and the considerable publicity that accompanies award-winning advertisements and agencies.

In summary, analysis of discussion on the use of online technologies to access research material revealed a distinct pattern, with participants highlighting the value of exposure to a large and varied amount of material drawn from the domain. This theme further establishes a belief in the value of on-going research in order to build knowledge and experience, an action that was seen, particularly by participants in the big idea grouping, as being more likely to produce novel ideas than task-specific or advertising industry-focused research.

The themes discussed in this section reveal complex and sometimes contradictory perceptions of creative process tasks and the context in which they take place. The discussion of creative process actions suggests that collectively participants follow a set of loosely structured, ad hoc work practices. This takes place in an environment in which they have a large degree of control over their everyday work processes beyond externally established time and budget constraints. In general, the time allocated for creative tasks was perceived to be decreasing, in limiting the amount of time that could be spent both thinking through new associations and refining ideas that had already been developed. Discussion of online technologies presented divisions according to practitioners' areas of specialty. It was noted that those in the big idea category commonly sought to avoid exposure to external sources of inspiration until after an idea had been developed. In contrast, fashion and digital advertising specialists completed task-specific and on-going research throughout the creative process. However, participants from all groups would turn to online sources of information when knowledge and experience failed to yield a suitable idea. Participants across all specialisms stressed the need for exposure to a large and varied amount of information both on a task-specific and on-going basis. It is from this understanding of creative process conditions and contexts that participant perceptions of the use of an online technology with intelligent agent capabilities can be considered.

6.4 Perceptions of Google use in the creative process

This section further explores perceptions of creative process actions by examining how Google search, a widely used software application with intelligent agent characteristics, is employed in the production of creative advertising. Five themes were developed using an analytical framework that

consists of both the Wallas stage-based model of creativity and the systems approach: Google search is used as a research tool and to develop new associations, search engines are perceived to hinder the creative process, recreational use of Google was perceived to influence work-related ideation, senior creatives believe their less experienced colleagues rely heavily on online media technologies, and participants possess an incomplete understanding of how Google functions. Collectively these themes reveal an ambivalent perception of Google search with the majority of participants voicing criticism of the search engine's influence on the creative process due to its provision of access to largely familiar online content, yet also stating that it is commonly used to fulfil creative process actions due to its speed and convenience.

6.4.1 Google search is used as a research tool and to develop new associations

The ubiquity of Google use was established with all respondents stating that they use the search engine at some point in the creative process. Responses to questioning on which search engines were used included 'just Google', 'exclusively Google' and 'Google, like everyone else'. One respondent placed considerable value on the efficacy of Google, as opposed to other search engines, with senior copywriter Emily stating, 'You almost don't want to risk it with anything else.' Participants rarely referred to other search engines, with Microsoft's Bing search engine only mentioned once. This finding suggests the term search engine is predominantly associated with Google, despite vertical search engines playing key roles in other online platforms such as YouTube or image library websites.

Participants commonly said that Google enabled them to find research materials, including visual sources of inspiration, social media content and information on a client's product or service.

You'll get to find out about little fashion houses in Denmark who are doing amazing stuff and you can take inspiration from that ... (Google has) become a portal to the rest of the world which is pretty amazing, whereas previously you would get Italian *Vogue* to have a look at that (content).
[Senior art director Geoffrey]

I'm always looking for new sources (of inspiration); generally Google is the first port of call. [Digital art director Drew]

Google search was discussed as a means of finding images that were capable of triggering new associations.

(Google) just becomes (the creative process) because I have the thought and then I just go to Google and Google Image it. So I put the keywords in and Google Image it and up comes random stuff around those keywords. [Senior copywriter Ian]

I've just been recently working on a beer label, so I just simply Google images, just Googling 'cool beer labels' so that's probably a recent example. Just getting yourself into that headspace. [Senior art director Steve]

Other participants described Google search as being useful when they lacked knowledge of a particular subject or were unable to develop new ideas on the basis of personal experience.

I might be thinking of an idea for (a soft drink company) and ... we know the demographic really likes NASCAR racing. I don't know a lot about NASCAR racing, so I'd type NASCAR racing into Google and look at the images just in case there was, 'oh wow, they use really interesting lights on the cars don't they', there is an idea in that with the (soft drink) cans ... just seeing if there is something I can grasp onto. [Mid-weight art director Hannah]

If I get stuck I definitely do a simple Google word search. When I see pictures, sometimes they are still images but I can still see them move, (they) come to life so that helps. I won't do it too much, it's not like I'll spend hours and hours, I'll spend five minutes. [Mid-weight copywriter Jack]

Descriptions of how Google was deployed in the creative process revealed varying degrees of use. While some participants described Google search as a vital aspect of their creative process, others qualified its use by suggesting the search engine is only occasionally used to develop new associations, with Jack for example stating that he 'won't do it too much' to avoid a reliance on the search engine. A few participants were critical of Google use. For example:

I wouldn't take keywords from the brief and put them into Google, that would be a bit of a pain (as) you would just get lots of Internet blabber. I know what I'm going to do before I go on there, I'm careful, I don't want to be derivative because the Internet is full of stuff that already exists. [Senior art director Miles]

In addition, a small group emphasised they limited their use of Google search to the verification stage of the creative process.

I'd never sit down and go, 'I've got this brief to crack, let's go see what's out there'. I never approach it that way because ... you basically are going to find someone else's idea and I don't think that's what's needed. Once you've established what the idea is you might then go say 'let's find something that is there' to polish the idea. Finding the technology to do something, the practical means of doing something, absolutely, but (to find) the idea, I think it's a real mistake to do that. [Digital art director Jeremy]

Other participants described Google use during various phases of the creative process. The following response suggests that the shaping of an idea in a verification stage can fold into other stages, such as incubation or illumination, to result in a stronger novel idea.

I'm doing this (campaign) for (global car manufacturer), which is an idea for their hydrogen cell car that they've got and the only emission is water so I had this idea about making bottled water that's come from the exhaust pipe of the car. So I got online and researched if anyone had ever drunk it out of the fuel pipe, and you can. The mayor of San Francisco had, so I found all these picture of him drinking it during press calls. I tried to look whether someone had done a similar idea and then just researched a bit about hydrogen cells and all that sort of stuff, it's something I didn't know a lot about and used it for that, so it was handy ... I can't really imagine doing that idea without Google because nobody believed me at the beginning that you would be able to do it. And I found this research to prove that it's right. [Senior copywriter Emily]

In this instance Google is used as a means of building knowledge, triggering a new association and evaluating whether another creative team had already applied her idea. The participant suggests that she cannot imagine undertaking this process 'without Google'. It is possible that a similar research process could have been undertaken prior to the development of search engines, however what has changed is the speed of access to information and the likelihood that another researcher may be following a similar pathway due to the algorithmic structures that shape the presentation of search results.

Participants had comparatively little to say on how search terms were constructed and consumed. However, analysis of discussion of search terms revealed that participants commonly entered 'broad' search terms into the search query box. When provided with search results the majority said they would scroll two or three pages of text-based results before clicking a link or adapting a search term. This recollection differs from the scholarly literature on search engine use, which states that users predominantly click the first one or two search results presented, and are not likely to scroll through several pages of results (Granka, Joachims & Gay 2004; Guan & Cutrell 2007). An approximation of the number of Google images that participants reviewed before refining their search terms was more difficult to gauge as these results are not 'paginated', that is, they are presented as a continuous flow of images on the one page. Participants commonly reported that they type full sentence questions into the search engine to recall information or build their knowledge. However, some participants stated that they would not type specific words from the brief into the search engine in a bid to find a 'solution' to a creative 'problem'. A minority of participants discussed their inputting of 'random' search terms or nonsensical questions into the search query box to see 'where it takes me'. For instance, mid-weight art director Hannah recalled typing the question 'What if I cut off my hair and

go into the snow?’ into the search query box of Google images to see if this triggered any ideas for a project she was working on.

In summary, it can be established that Google is often used to fulfil research actions and develop new associations. The majority of participants discussed the use of Google to find images, while text-based search was characterised in terms of its ability to refine an existing idea or to identify ‘practical’ information, such as information about a client’s product or consumer behaviour, rather than to build a new association. Variations aside, it is clear that Google search acts as a conduit between study participants and the domain system. It is worth noting that the recommendation features of Google search, such as ‘Google Instant’ or ‘searches related to listing’, were not mentioned as a means of developing new associations, an omission that either suggests these applications are not utilised or have become normalised in search engine use and are therefore not visible.

6.4.2 Search engines are perceived to hinder the creative process

A variety of opinions emerged when participants discussed the influence of Google search on creative process actions. The majority believed the use of Google search hindered ideation, yet this perspective was far from unanimous, with a third of participants suggesting that the search engine had a positive influence on creative process actions.

Participants who perceived Google search as a hindrance to creativity offered a series of reasons for their view. One of these was the belief that search engines were an inefficient way to use the time allocated for the creative process.

Often it doesn’t yield much. It’s amazing, you imagine Google to be this omnipotent thing but it’s pretty blunt often. [Senior copywriter Andy]

While not a commonly made observation, this statement highlights a complexity surrounding perceptions of Google. It is a generalist search engine yet is still used in a highly specialised area of creative practice. As a generalist search engine, it will provide information on what is popular or capable of responding to the cultural literacy (awareness of cultural rules and symbols) of an audience, both of which are essential to creating an advertisement that suits a particular domain. However in the process of making an advertisement, Google search can also lead to a reiteration of the already known.

As a means of articulating how he avoided this, Andy went on to discuss his preference for ‘surfing’ the Internet by accessing web pages via links on websites he trusts as opposed to using the ‘blank canvas of Google’ as he believed surfing produces a ‘clear pathway’ of related information. Andy also perceived that surfing rather than searching introduces less distraction into his creative process.

One thing I notice about myself and much more with young people, you kind of get this ADHD, it’s so easy to be scatter brained and jump between things. I sometimes find it causes you not to stay on a route, because sometimes you really need to interrogate something ... it’s really easy to just do a million things at once (when using Google). [Senior copywriter Andy]

In a similar vein, senior art director Andrea mentioned a preference for accessing content via trusted web pages, generally blogs, rather than through Google search. When asked why, she responded: ‘I often can’t find what I’m looking for, I get distracted and I find something else and I waste away a whole couple of hours.’

The ease with which Google connects participants to existing and familiar ideas was also identified as a hazard of search engine use. According to creative director and copywriter Phillip, search engine use in the creative process diminishes the ability to achieve novel associations as it exposes creatives to ‘ideas that have already been distilled’. Digital art director Jeremy offered a similar position:

(When using Google search) you’re out there looking for someone else’s idea or looking for an idea that you can co-opt as opposed to analysing what the actual solution should be within your own mind. To me it’s not about approaching it logically, it’s about a random process. [Digital art director Jeremy]

On the other hand, mid-weight copywriter Jack foresaw another possible detrimental outcome of this practice: ‘If I’m doing the research (using Google) and someone from a competitor brand is doing the same thing potentially we could get our ideas from the same source’. It is interesting to note that Jack’s statement suggests that all participants receive the same search results, in other words it indicates an assumption that search results are either not or poorly personalised. Senior art director Geoffrey, however, was very aware of this condition when discussing the influence of Google search on his creative process: ‘It sort of feels like it’s trying to keep me in a bubble of what it thinks I want and that’s not very applicable in the creative industries.’ Creative director and art director Peter described the feeling of being taken on a predetermined pathway:

(Google) can remove your own training from the process of coming up with an idea, you can actually end up going down an incorrect pathway purely based on the style or inappropriate style, it might be something that you are attracted to but it might not be appropriate. [Creative director and art director Peter]

Both Geoffrey's and Peter's responses reveal an awareness of a bias towards known information that is a result of Google's personalisation algorithm, the technology that, in concert with PageRank, contributes to the search engine's pre-emptive, and thus intelligent agent, capabilities.

A small group of participants stated a preference for using their own repository of research materials such as note taking programs or the more traditional sketchpad or notebook.

I just keep notes and bookmarks. I have them for architecture, blogs, there's so much stuff now, interesting agencies, miscellaneous ideas. I have this thing called 'one liners' where I just put in one-off things that are not related to anything. I have hundreds of these now. Just stupid things that could be a joke in an ad, so I have a pretty big (collection). It's more like they are simmering around, it's not like (I say to myself), 'shit I need to come up with something'. [Senior copywriter Andy]

What I have used in the past ... are big books which I just fill with imagery. Over my career I have ripped different things out and pasted them in. It's random stuff like spaghetti or giant tongues from a collection of books over time. And if I get stuck on an idea I'll sit there and flick through and look at those images and it will get me out of a rut. [Digital art director Jeremy]

Jeremy sees his personally 'curated database' as a superior approach as it has been filtered and knowingly stored by the user. In this instance access to the domain system is inflected with the participant's own decision-making processes – as suggested by Andy's description of these ideas 'simmering around' – rather than those presented immediately by Google.

The majority of participants discussed Google solely in terms of its ability to access new information – the act of discovery – from the domain system. However there were exceptions, with a small number of participants discussing Google's ability to recall information:

I just Google anything to the point that nowadays I don't even know if intelligence is now even having knowledge or knowing where to find it quickly, so it's sometimes in between because you often find yourself, when you don't come up with the answer or something in a couple of seconds, I will go back to Googling it rather than thinking it for about five to 10 minutes. [Senior art director Oliver]

Google is automating the act of recall largely due to its speed and convenience and, in effect, it acts as a transactive memory, a concept that describes the act of bringing memory into consciousness with the help of others (Wegner & Ward 2013). This observation brings into question the influence of adaptive search engines on ideation. Are memories that are inflected with the practitioner's experience more

capable of contributing to the creation of novel ideas than those drawn from the standardised 'external memory' of Google? The value of forgetting is also relevant here. If ideation is supported by the acts both of remembering and of forgetting, what are the unplanned influences of an external memory that has emerged as an omnipresent appendage of modern living?

Not all participants perceived Google as a threat to the creative process, with some participants believing that the search engine had little agency and thus minimal influence on everyday tasks.

It's just a search tool ... just like a hammer to a carpenter... it's not going to give you the answers. [Mid-weight copywriter Xavier]

(Google is) an information tool, I think that it's important that we don't categorise it as a creative tool, it's just a tool ... it's used to look for everything, information, statistics; it becomes a tool in the creative process but I wouldn't label it a creative tool, it's part of a tool kit, we have dictionary (but it's not) a creative dictionary because I am using it in the creative process. [Digital art director Drew]

Just because someone hands you a paintbrush doesn't mean you're Da Vinci. At the end of the day a tool is that, just a tool. [Senior art director Jace]

The perception of Google as a 'tool'²⁷ indicates a belief that the search engine operation is delimited by the intentions of the user. In other words, this perspective assumes that all the actions are confined to the demands of the user, which, as noted in Chapter Two, is not the case due to Google's abilities to pre-empt user intentions.

Other participants believed that using Google ultimately presented more benefits than drawbacks.

It could take you somewhere or not, if it doesn't it's not like you've walked to a library and wasted a whole lot of time, you can do it on your own, it's just really quick and easy, a real random collection of things and also getting at what are people actually watching, what are people reading, what are people looking up. [Mid-weight art director Hannah]

For Hannah, while Google does not always offer the solution she desires, it conveniently opens up new opportunities by exposing her to a 'random' collection of research materials. It is interesting to note that Hannah perceives Google as offering access to a form of domain knowledge which is the opposite of novelty, that is, a better understanding of the cultural means and the already known. Emily's discussion of Google use is more overtly focused on convenience:

²⁷ This is the term offered by participants rather than a word used in interview questions.

(Google is) just such a great source of inspiration ... rather than going to the library you can just read (online). I know (the information Google provides) is limited, but no I don't think (it limits my creativity). [Senior copywriter Emily]

Once again, a detrimental effect is noted, however this problem, exposure to a limited range of material, is seen as an acceptable payoff in return for convenient access to information.

In summary, a variety of views were noted on Google's influence on creative process tasks. Participants who offered a negative perception of this search engine variously believed it limits their ability to focus on a creative project, exposes them to existing rather than new ideas or presents a personalisation bias. A smaller number of respondents said Google did not limit creativity. While some stated that any negative effects were outweighed by the speed and convenience of its information retrieval, others perceived it to be 'just a tool' or an impartial conduit to information. Clearly Google search is viewed with ambivalence by many of the study's participations. While it was commonly noted that the search engine could hinder their creativity, all participants confirmed that Google search was used at some point in the creative process.

6.4.3 Recreational use of Google was perceived to influence work-related ideation

Participants commonly said that they used Google 'a lot' or 'often' in their personal lives. Digital art director Drew, for example, described the use of the search engine in all aspects of life as 'second nature in the digital era'. Indeed, Google is increasingly being used as a means of answering questions on most topics. As a 'world brain' (Hillis Petit & Jarrett 2013) or a repository of 'information for living' (Jensen 2012, p. 194) it is assumed Google is capable of answering questions on everything from recipe suggestions to fixing wet smartphones.

For some participants, personal use of Google informs how they use the search engine at work. Senior art director Geoffrey described his personal use of Google search as providing him with 'lessons on how to put in a good search term' that can speed up work-related search actions. Senior art director Vicky offered a similar perspective: 'Using Google in my personal life has made me more savvy in understanding if I go there what keywords I need to use when I'm looking for creative content.' In addition, she stated that Google is 'the first thing I think of' when she needs to find information, a

perspective that suggests Google use is a habitual action in the creative process. The habitual use of the search engine was also mentioned by senior art director Miles, who also stated that personal use of Google search influenced the type of content that was deployed in the creative process.

I have developed online habits (from personal life use of Google) even though I try to fight it. For example I am a massive Liverpool football fan so I will check their website, I am just so hungry for information about Liverpool. And I find in my pursuit of those things I find the website and the forums and chat rooms and I think that's where I've realised, I probably realised that Google is a place of commentary where football fans, where people express an opinion ... I've got a research group at my fingers, which is kind of creepy, but I can go in and I can find out about people and I can learn and know what they are talking about which goes into what I'm talking about, listening to people's reviews and random things like that. [Senior art director Miles]

Miles' statement reveals the perceived work-related benefits he derives from the use of the search engine in personal contexts: Google is used as a means of locating online conversations on particular topics. As discussed in Chapter Four, practitioners commonly apply knowledge and experience gained in their personal lives to their professional creative process actions. However, extensive use of Google in both personal and private life contexts points to the development of a virtuous cycle of search engine use: the more it is used in one sphere the more it is likely to be applied in another.

In summary, a pattern emerged that indicates Google is used extensively in the personal lives of participants. This condition is capable of intensifying its use in their professional world. Just as Google has emerged as a guide to everyday living in personal contexts it is also increasingly presenting itself as the answer for work related 'problems'.

6.4.4 Senior creatives believe their less experienced colleagues rely heavily on online media technologies

Discussion of Google in professional contexts prompted a group of more senior participants to criticise their younger colleagues for their heavy reliance on online media, including Google and YouTube. This was seen as a problem for a number of reasons, with senior participants stating that using online media wasted time or encouraged younger creatives to believe that aspects of the creative process, such as research or the forming of new associations, could be delegated. It should be noted that while the interviewer attempted to steer conversation towards a discussion of Google, there appeared to be a conflation of Google with the Internet for some participants. For many people the two are

inextricably linked, which is not particularly surprising given that the search engine has emerged as the primary conduit to online content. For many, Google has become an interface to the Internet and precedes the accessing all information, even familiar sites.

The following statements are indicative of the criticism levelled at younger creatives regarding their use of online technologies:

They just waste their time on it, it's just a big massive hole that they fall into ... I get the draw of it, but I think you have to be really careful with it, it's an amazing tool, an incredible tool, but it's not the be-all-end-all, it's not the solution, it's part of the solution. So ideas first, try to come up with the idea first so at least then when you are using this tool you've got guidance, rather than just going 'I don't know what I'm looking for'. [Senior art director Miles]

The Internet is a problem with younger people not concentrating on ideas (and) constantly checking Facebook. It's a real problem actually, I certainly see in young people (that there is a) real distraction (as they don't sit) down and (go) through a solid thought process and I guess that's why I don't like using Google for that because I think you should use these things called brains. [Digital art director Jeremy]

Jeremy's comment that creatives should go through a 'solid thought process' implies a belief in the value of the creator applying their knowledge and experience, and that the use of Google and social media may disrupt that process. The perception that younger creatives think Google contains answers that are capable of 'solving' a creative brief was also discussed:

I think there is a tendency for younger creatives to think they can find the answers to the creative problem on Google rather than realising it's a facilitator, you're not actually going to solve the brief by kind of Googling it. [Senior art director Vicky]

Awareness that senior creatives were critical of the overuse of online technologies was revealed by the following response from one of the study's younger creatives:

I think (more experienced creatives) are conscious that a lot of creatives spend a lot of time on YouTube and muck around, and you have to do that to an extent. [Mid-weight art director Hannah]

Hannah's comment suggests the recreational use of online platforms at work is a vital part of her creative process. Hannah did not elaborate on why it is beneficial, however it is possible that she uses online technologies as a form of distraction that can trigger new ideas when her mind is not consciously focusing on the brief. This idea hints at the possibility that Google search is capable of acting as a technological subconscious that makes associations on behalf of the user when determining

access to online content or presenting options through Google Instant, which the user is unable to distinguish from their own internal combining of ideas.

The naturalisation of online technology use by younger creatives was touched upon by digital art director Jeremy, who stated: 'I don't know if it's because people our age grew up for a certain part of their lives without the Internet where younger people have embraced it head on.' Similarly, senior art director Oliver believed that older creatives may be more questioning of the influence of online technologies because:

We had to go through a certain process and learn about these things because they have slowly crept into our life. While if you're younger, even if you are just eight years younger, they are so normal to you. [Senior art director Oliver]

This highlights a concern by senior creatives over the delegation of creative process actions to online technologies such as Google by their younger colleagues, a point that was also touched upon in theme two of this section. The observation by senior creatives that they are more questioning of how technologies are employed in the creative process is relevant in terms of understanding the influence of generational change on the creative process. It could be argued that the naturalisation of search engine use is likely to intensify as younger creatives progress in their careers. However, this observation by senior participants cannot be accepted completely at face value. In voicing criticism of younger people's reliance on online media in the creative process, senior practitioners may also be projecting concerns about their own use of this channel, and in effect Google as a primary point of access. The perceptions of senior practitioners that younger creatives are homogenous in the way they use ICT is just one perspective on what is likely to be a diverse set of work practices.

6.4.5 Participants possess an incomplete understanding of how Google functions

Participants varied in their awareness of how Google filters its search results with the majority discussing one filtering mechanism. Only two participants, both of whom specialised in digital advertising, discussed both the PageRank and personalisation algorithms, which are generally accepted as Google's most influential filtering mechanisms (Halavais 2009; Vaidhyanathan 2011; Hillis, Petit & Jarrett 2013). This loose understanding of how Google filters online content is not

surprising given the large number of undisclosed factors that are used to filter search engine results; PageRank, for example, takes over 100 'signals' or factors into consideration when ordering search results (Goldman 2005–2006), and it is believed that in total Google considers approximately 200 factors when analysing a web page (McCormack 2012).

The most common mechanism discussed by participants as to how Google filters its results is personalisation. As discussed in Chapter Two, personalisation refers to the process of learning from a user's past online behaviours to pre-empt a search inquiry. The personalisation of research results based on the user's location was commonly mentioned. For example, Brisbane-based senior art director Steve described a 'game' he played with an art director in Melbourne in which both entered the same search term into Google before discussing differences in their results. Other participants believed that Google took previous search enquiries and their previous exposure to online content into consideration.

It's ... based on my preferences, what kind of things I've looked for, what kind of things I've clicked ... if I've been looking a lot for guitars and surfboards it will give me back a certain amount back based on surfing and guitars. [Senior art director Oliver]

In this instance the term 'preferences' was used to describe a profile that the search engine is perceived to have developed about this user to pre-empt his searches. A similar point of view was offered by the following comment:

From what I am able to understand it's able to build a profile on a search user ... not that it makes decisions based on your past user experience, but it's obviously collecting some form of data on you. [Digital art director Drew]

Despite specialising in digital media, this participant exhibited a limited knowledge of the workings of the search engine. Rather than suggesting a lack of willingness on behalf of the practitioner to build his knowledge, this instead could be interpreted as an outcome of the search engine's lack of transparency with regard to its collecting of data about its users.

A consideration of online content gathered from other Google platforms was the focus of another participant's description:

If you type in cars or whatever and my girlfriend types in cars, it could come up with different results, I do know that they have that technology now ... I've got a Gmail account, they might scan my subject lines or emails ... At first I would be like 'that's really weird' you know but that's been a few years now. [Mid-weight copywriter Jack]

Jack was the only participant to reveal an understanding that Google uses information gained from its other online platforms to anticipate the user's information-gathering actions (Google 2013), a finding that suggests there is limited awareness amongst participants regarding the organisation's data-gathering actions. It is interesting to note that this participant was initially surprised by the use of personal information but then appeared to accept this condition, an acquiescence that hints at the naturalisation of this form of search result pre-emption.

While personalisation was the most commonly mentioned filtering determinant, a range of other factors was described. A small group said the 'popularity' of web content determined search engine filtering, with mid-weight art director Hannah, for example, suggesting search results had 'something to do with popularity'. Mid-weight copywriter Xavier went into further detail:

The more people that click on something the more it affects the rank and it goes up, so in a way it is a popularity thing isn't it, that you are going to get something that many other people have gone to. [Mid-weight copywriter Xavier]

For this participant, the number of times a web page has been visited has an impact on its placement in search rankings. While this form of 'popularity' may have some impact on search engine rankings, it is of less influence than other PageRank algorithm parameters that focus on in-bound links to establish the 'importance' (Diaz 2008, p. 15) or 'authority' (Halavais 2009, p. 18) of online content. Only two participants mentioned filtering characteristics in ways that reflected an awareness of both the PageRank and personalisation algorithms. As discussed in Chapter Two, these two algorithms provide Google with its intelligent agent capabilities.

A small number of participants said that Google predominantly matches keywords contained in online content to search terms written in the query field – a filtering model used by the majority of search engines prior to the development of PageRank (Battelle 2005; Halavais 2009). Senior art director Steve stated that search queries were matched to the 'most relevant' keywords within a web

page but did not expand upon this condition. Another participant, Peter, did however offer his perception of the concept of relevancy:

It's based on providing the developers with specific parameters ... the more relevant your website is to the result the more (sic) higher it is going to rank. So if you have a web page about something specific but in the title you have a different keyword then you are going to be ranked lower.
[Creative and art director Peter]

The following responses are indicative of perceptions voiced by a small number of participants who appeared to conflate Google's organic searches with paid searches listings.

Well they definitely filter content by who's paid for a premium position with keywords like 'denim' for example, so I think they're kind of manufactured. [Senior art director Vicky]

No, other than people paying, pay for words and search strategies. I know they do that sort of thing.
[Creative director and copywriter Phillip]

The above responses are not surprising given the professional context in which these practitioners work, one that is likely to focus on communicative acts between client and audience.

A small number of participants linked search engine functionality to specific creative process barriers. Art director Oliver stated that there was a danger in personalisation as it 'narrows' his 'field of vision' when using the web for research purposes. Digital art director Luke, who works in the Brisbane office of an agency with headquarters based in Sydney, expressed a similar concern:

If you take our organisation for instance ... we are effectively all connected to the Internet through one pipe ... which means effectively if someone in (the head office in) Sydney spends a couple of days pulling a particular type of content and clicking a particular type of content and I go do my search up here (Brisbane) I get the net result of what he did because Google says 'I see what you're interested in'. [Digital art director Luke]

For Luke, personalisation becomes problematic when an organisation uses the one 'pipe' to connect to the Internet and the search engine is unable to build profiles of individuals within an enterprise. The existence of these 'distortions', as Luke described them, are likely to be the driving force behind Google's push to have users sign in to their products. Luke went on to detail the influence of PageRank on research actions:

The one thing I find interesting about Google is their shift from the nature of the content to the nature of the popularity of the content, and I think for our industry – and I guess that's where you're coming at – all of those blogs that we have that help bring that content together are actually affecting Google serving that. So if you have 10 industry blogs and those industry blogs are pulling content of the same nature, Google reflects it. [Digital art director Luke]

The linking together of industry blogs collectively builds their rankings in search results thereby reinforcing their exposure to a specific audience. It also suggests that Google, to some degree, plays a role in amplifying the 'echo chamber' of industry self-perception and the production of knowledge.

The following observation revealed a similar perspective:

What tends to happen is that people find the information they are after quicker and therefore tend to look through less material and therefore reference the same (information) that everyone else is finding and therefore it becomes a self-feeding cycle. [Digital art director Jeremy]

Jeremy was one of the few participants to identify a connection between search engine use and the narrowing of experience with regard to information discovery actions. As such, he is part of the minority of participants who are cognisant of the influence of search engines on what Sawyer (2012) suggests is a vital aspect of the creative process:: exposure to wide-ranging and varied source material that can contribute, consciously or unconsciously, to the development of a novel idea.

Personalisation was the most consistently identified filtering mechanism, possibly due to the more visible nature of its influence on search result rankings. Popularity was often discussed, however descriptions of this process were often vague or focused on the number of page views rather than the number of in-bound links, the latter being a fundamental condition of the PageRank algorithm. This limited understanding of how Google filters its search results suggests the search engine largely exists as a 'black box' – a technology that is characterised by a lack of user awareness of its inner workings – for the majority of participants. It is interesting to note that despite participants commonly voicing concerns that Google search limited exposure to unusual or novel online content, the existence of the two main algorithmic processes that contribute to this condition was scarcely known.

In summary, this section reveals that Google is widely deployed as both a research tool and to a lesser degree as a means of developing new associations on behalf of the user. Yet despite the widespread use of Google search, practitioners commonly raised concerns about its influence on creative process tasks. These concerns predominantly included the perceptions that the search engine, in concert with other online media, was a form of distraction or that search engine use resulted in greater exposure to familiar information in research for a brief. However, it should be noted that these apprehensions were not considered enough of an incentive to completely avoid Google or to use

another search engine. Exposure to the familiar, to ideas that already exist, emerged as a concern that senior practitioners had about their younger counterparts, who were perceived to be overly reliant on using technologies to develop ideas rather than undertaking an ideation process predominantly reliant on personal knowledge and experience. Despite the concerns raised about the exposure to the familiar when using search engines, very few understood how Google filters its search results. In effect Google, a primary means of accessing online content, exists as a black box that is widely used but not questioned even when it fails to deliver desirable results.

6.5 Awareness of intelligent agents and perceptions of their influence

This section explores participants' awareness of the term intelligent agent and their understanding of how these programs function. As discussed in Chapter Two, Nwana's identification of the characteristics of autonomy, the ability to learn and cooperation (1996) offers a workable description of the intelligent agent concept. Analysis of responses to questions pertaining to intelligent agents reveals a low awareness of this form of software and its affordances. Few participants perceived Google search as an intelligent agent or possessing intelligent agent capabilities, however examples mentioned by participants, such as Siri, Apple's mobile device assistant, or retailer Amazon's recommended selling function, fulfil similar functions by adaptively filtering online content. Participants who were aware of intelligent agents, either by name or after having the term explained to them, predominantly offered negative or ambivalent perceptions of the influence of this type of software on the creative process.

6.5.1 The intelligent agent concept is largely unknown

Few participants were aware of the term intelligent agent and those who had heard of the concept commonly expressed uncertainty. This was an anticipated outcome due to the largely unannounced emergence of intelligent agents that are integrated into existing software platforms rather than emerging with a separate user interface.

The small number of participants who said they were aware of the term intelligent agent offered examples of the concept rather than definitions. For example:

I think I know a little bit about it, it's online shopping, showing you what it thinks you might like based on your previous search results, like Amazon, I think does this. It keeps a record of what you've looked at on previous searches and it will keep showing you those same things again thinking that if you liked it the first place, it's called recommended selling. [Senior art director Geoffrey]

It could be argued that the product recommendation algorithm used by Amazon exhibits the three intelligent agents traits identified by Nwana (1996) of autonomy, the ability to learn and cooperation. Geoffrey's response, by his own admission, suggests a limited knowledge of intelligent agents outside e-commerce environments that relate to his own area of professional expertise. Digital art director Drew also offered a limited understanding of the concept: 'I don't know a lot about them to be honest ... (They would be) like an AI kind of agent.' After a brief period of contemplation, Drew elaborated on his description by offering iTunes Genius as an intelligent agent example, one that is 'a very good agent, it's able to work out what your regular usage is, what your particular music tastes are and suggest (songs).' Like Geoffrey, Drew argued that an intelligent agent works autonomously to pre-empt the user's digital media intentions based on knowledge of the user.

Digital art director Luke took a different approach by describing how Google had embedded intelligent agent capabilities into its Nexus tablet's operating system:

If you want to see the best example, (look at what) Google is doing with the Nexus ... their version of the iPad. When you turn it on ... it will already have the route mapped for your next appointment in your diary ... you start going 'what am I doing?' and this thing steps in and has so much knowledge about you (like the) stuff you've searched for. [Digital art director Luke]

This description contrasts with examples provided by Geoffrey and Drew of single goal agents that fulfil one task largely in isolation from other intelligent agents, however an understanding that intelligent agents gather information about the user and autonomously act on that information is common to all three descriptions.

Limited awareness of intelligent agents amongst participants can be attributed to two factors. Firstly, there has been little mass media consideration of the concept since the late 1990s, which was a time when intelligent agents were being discussed in both mainstream news and technology

publications. And secondly, the most widely used contemporary intelligent agents have been embedded into existing ICT, such as Google search and YouTube, rather than emerging as digital assistants with separate user interfaces. The ‘behind the scenes’ existence of Google search’s intelligent agency has made the concept largely invisible to users and thereby reduced the requirement for a name to be widely used to describe these entities.

6.5.2 Negative and ambivalent perceptions of intelligent agents were offered

Participants who had not heard of intelligent agents commonly asked the interviewer to explain the term. The definition provided by the interviewer²⁸ resulted in several participants voluntarily identifying an example of a software application they considered to be an intelligent agent. For example, after hearing the researcher’s definition, senior copywriter Andy stated: ‘I’ve heard of lots of examples just not the expression ... (it’s) like Amazon suggesting books to you.’ Other participants mentioned the music applications iTunes Genius and Spotify, YouTube’s video recommendation function and the iPhone personal assistant Siri. These participants, in addition to the participants who were aware of the term, predominantly expressed concern or ambivalence about the influence of these programs on the creative process.

When discussing the detrimental effects of intelligent agents on their work practices, participants commonly mentioned the possible outcome of a reduction in exposure to unfamiliar online content.

I haven’t used (intelligent agent software) and I don’t know whether I’d be very happy using that because you can only assume that it’s based on a similar scenario (to recommended selling) that it will keep giving you the same thing [Senior art director Geoffrey]

Creative director and copywriter Phillip was concerned that the presentation of recommendations based on previously searched items in YouTube and Google would limit him to what he has ‘already seen in the past’ rather than showing him new information. For this participant, personalised content

²⁸ Intelligent agents were described as software that observe their environment and autonomously act in response to this knowledge on behalf of the user.

recommendations were ‘just the tip of the iceberg’ with regard to the blurring of boundaries between human and machine intelligence:

It’s our intelligence, it’s ours to some degree because it’s based on us ... (but it’s) less intuitive and more based on a distilled search that is sending your intelligence back to you. [Creative director and copywriter Phillip]

Other participants were ambivalent about the influence of intelligent agents.

I don’t think it’s there yet, I mean they’ve been talking about it since *The Jetsens* and it’s still rubbish. Unless it’s as quick as you are I think most creative people would find it very frustrating, like having to explain it to a slow assistant in a way. [Senior copywriter Emily]

It’s a massive danger because it’s (taking) away one of the most fun parts ... searching, however it could be good, because it’s wonky and not quite right, it could be a good tool to see ... where it could take me. You never know, it could expose me to some interesting stuff. [Senior art director Miles]

In both instances, it is assumed that the user directly manipulates an intelligent agent, that is, that he or she is able to dictate when it is used. While this may be the case with intelligent agents that allow direct manipulation such as Siri, the intelligent agent capabilities in Google search, for instance, are always working unless the user takes the time to ‘opt out’.²⁹ Moreover, the invisibility of intelligent agents’ actions precludes the creative from even being aware that these are influencing search outcomes. The vague nature of these responses is not surprising given the general level of uncertainty presented over the meaning of the term intelligent agent. While only a minority of participants engaged in discussion of intelligent agents, it is worth noting that their concerns matched previously stated issues regarding the use of Google search in the creative process, namely that it encourages exposure to the familiar and as a result is capable of encouraging the production of overly derivative outcomes.

The discussion of intelligent agents in the interviews revealed a limited awareness of the term amongst participants. Those aware of the concept perceived intelligent agents to be applications that autonomously gather information about a user to pre-empt their future digital media consumption. This understanding was presented by another small group of practitioners who were unaware of the term but could offer examples of intelligent agents after the interviewer had provided a definition.

²⁹ Google search allows users to search in ‘private’ mode or turn off their ‘history’ to avoid previous online behaviours being applied to future searches (Google 2014).

Discussion of the influence of intelligent agents on the creative process resulted in the majority stating that they would either have a detrimental effect or present both benefits and barriers to ideation. Collectively, participant discussion of intelligent agents and their capabilities suggests this form of software remains, at both a conceptual and computational level, largely unknown. Yet regardless of this lack of awareness, Google search – a widely used ICT with intelligent agent capabilities – was identified as being part of the creative process of this group of participants.

6.6 Conclusion

This chapter analysed a group of Australian art directors' and copywriters' perceptions of their creative process and use of online technologies, with an emphasis placed on Google search. It found that the everyday tasks of these practitioners generally consist of a series of loose and ad hoc events that reflect, albeit in a non-sequential pattern, the Wallas/Young stage-based models of creative practice in terms of cognitive tasks and individual behaviour. In addition, analysis confirmed that the communicative relationships to the domain and field systems exist as outlined in the systems model of creativity. It is clear that ideas do not emerge in isolation; they are the result of interaction with the domain and shaped by what the field considers to be creative. This knowledge establishes an understanding of the influence of an incipient form of intelligent agent technology in the working lives of practitioners. The themes that emerged regarding new media use reveal that Google search is being deployed as a means of accessing the domain, including identifying audience behaviours, knowledge recall, knowledge building, concept refinement and association making. In an unexpected finding, other emerging uses of Google were identified, including the existence of the 'Google check', a means of evaluating the originality of a creative concept. Participants held a range of views on the influence of Google in the creative process, with some participants attempting to avoid the search engine and online media in general until after an idea had been formed, while others considered the search engine to be an integral part of their research actions. Those with concerns however did admit to using the search engine at other times during the creative process and when building their knowledge of the domain in an on-going sense. There was a limited collective awareness of how Google functions, an

expected finding given the lack of transparency surrounding its operation. The program therefore exists largely as a black box for participants. In another anticipated finding, few participants were aware of the concept of an intelligent agent. Those who did understand the concept or expressed an awareness of the term once it was explained were either concerned or ambiguous about the influence of this technology on the creative process. When misgivings were raised, these reflected the concerns voiced about Google search; namely the belief that this form of technology would predominantly provide exposure to 'what already exists' rather than diverse information. With these collective observations documented, the potential benefits but also the hidden losses associated with Google search will be taken up in the next chapter.

Chapter Seven

THE INFLUENCE OF GOOGLE'S INTELLIGENT AGENCY ON ADVERTISING CREATIVITY

7.1 Introduction

This chapter examines the broader implications of participant interviews in terms of both how technologies are currently used and how they could be applied in future creative practice. In doing so it documents a technological trend through a set of theoretical premises as well as the current perceptions of practitioners. Importantly, it acknowledges that technological change always outpaces, to some degree, its users. This exploration is divided into four sections. The first considers the influence of Google search use on the social context in which creative advertising is produced. Questions are raised about the imposition of an algorithmic rationality onto the largely unstructured everyday work practices of art directors and copywriters. The second section examines the influence of Google search on specific creative process tasks. In order to pre-empt the user's search intention Google draws upon the collective intelligence of the Internet, which results in an algorithmic bias towards popular and familiar online content. This is evinced both in the selection of materials used by practitioners and the act of association making. The third section considers the naturalisation of Google's intelligent agency. Because it did not emerge as a standalone intelligent agent with its own user interface, the search engine's 'below the surface', pre-emptive functioning and affordances are largely unrecognised by users and thus remain unquestioned. The final section builds on the dissertation's analysis of Google search to speculate on the application and influence of other software with intelligent agent capabilities on the creative process of art directors and copywriters.

7.2 Informational Taylorism's influence on advertising creativity

As the most commonly visited website in Europe, North America and Oceania (Information Geographies 2014), Google search has an influence that goes beyond providing a primary means of accessing online content. The values embraced by the developers of this software and inscribed in its algorithmic processing reveal the influence of a form of Taylorism, or scientific management, on knowledge work tasks. Within the paradigm of what can be described as informational Taylorism, the interrelated values of efficiency, speed and flexibility have emerged as institutionally accepted structures that, when applied to the practitioners' reflections on the use of search engines, indicate an iterative conditioning of advertising creativity.

Analysis of empirical data revealed that art directors and copywriters who focus on creative advertising commonly avoid online content until after an idea has been formed. Yet it is worth noting that these practitioners said they would go online when their knowledge and experience was exhausted or to refine a creative concept. This suggests that despite their concerns that search engines can lead to overly derivative outcomes, they believe that Google is capable of getting the job done, quickly, efficiently and conveniently, when needed. While there can be little doubt that Google's application of collective intelligence brings order and clarity to online research actions, a series of less obvious trade-offs are simultaneously shaping the production of creative advertising. This section focuses on the hidden losses that occur influence the social context of creative advertising. It argues that Google's institutional values and principles encourage a standardised approach to knowledge work in fields such as creative advertising.

7.2.1 *The promise of efficiency*

First published in 1911, Frederick Winslow Taylor's *The Principles of Scientific Management* (2006) outlined a time-based means of standardising the production process in a more 'consistent and machine-like fashion' through the application of rule structures (Wright 1993, p. 38). In effect, 'Taylorism' advocated the transference of decision-making from workers to managers who in turn were guided by engineers. These engineers were charged with the task of observing and measuring

the production process, most notably through 'time in motion' studies, to identify the 'one best way' to complete a series of interrelated tasks. It is an approach that, according to Postman, relies on a series of assumptions:

The beliefs that the primary, if not only, goal of human labor and thought is efficiency; that technical calculation is in all respects superior to human judgment; that in fact human judgment cannot be trusted, because it is plagued by laxity, ambiguity, and unnecessary complexity; that subjectivity is an obstacle to clear thinking; that what cannot be measured either does not exist or is of no value; and that the affairs of citizens are best guided and constructed by experts. (Postman 1992, p. 51)

Taylor's model was initially celebrated by early 20th century industrialists, yet came to be regarded by many managers as problematic due to the rigidity of its predetermined workflows and worker discontent at being treated as machines (Kanigel 2005, p. 10). Though Taylorism was rarely implemented and sustained as its creator envisaged, an influential legacy of this theory has been the emphasis placed on labour productivity in organisational environments (Waring 1991, p. 9).

In the network society era a number of authors, including Neil Postman (1992), Gene Rochlin (1997) and Nicholas Carr (2010), have discussed how the Taylorist paradigm can be applied to ICTs to understand their influence on knowledge workers. In many ways, ICTs and the software that provides them with instructions epitomise the Taylorist 'one best way' paradigm by following abstract rules and procedures that encourage workers to follow a particular mode of action. If Taylorism can be understood as 'the application of scientific methods to the problem of obtaining maximum efficiency in industrial work' (Waring 1991, p. 7), informational Taylorism can be understood as the application of scientific methods to achieving efficiency in knowledge work. Unlike 20th century Taylorist doctrine, the logic of informational Taylorism is not necessarily promoted by management, but instead manifests in peer influence that encourages the use of pre-emptive technologies. However, what the two have in common through a premium being placed on efficiency is the potential de-skilling of workers and a loss of craft that results from the standardisation of tasks.

Sitting between the worlds of art and commerce, the production of advertising creativity since the industry's 'creative revolution'³⁰ appears to have largely escaped the Taylorist legacy of standardisation. As discussed in Chapter Four and indicated by analysis of empirical data, advertising practitioners are commonly given leeway to work as they please, and heavily standardised processes are not imposed by management. However, the strategic nature of advertising and the need for a large number of messages to be produced means that advertising creativity must be produced within a set of industry-specific constraints. Creatives are required to balance freedom and constraints, and this precarious balancing act may be moderated by the informational Taylorism espoused by Google. The company's dominance in the field of search has resulted in a standardisation of online search both as a product and a practice. With regard to the latter, Google has emerged as the 'one best way' to locate information across the converged media environment but it also may transform other tasks as the scope of its information management grows. As senior copywriter Emily put it, 'You almost don't want to risk it with anything else', and similarly, senior art director Oliver stated, 'when you don't come up with the answer or something in a couple of seconds, I will go back to Googling it rather than thinking it for about five to 10 minutes.' Thus Google encourages adherence to rule structures to achieve efficiency in tasks that were previously carried out without the assistance of ICTs. However, Google's emphasis on efficiency is not just the result of market domination. A key aspect of Taylorism in its original form was the observation of assembly line workers to identify ways to eliminate inefficiency. In the network society era, software with intelligent agency capabilities, such as Google search, are following a similar path by observing and analysing knowledge workers to provide efficient access to 'relevant' information. The concept of search result personalisation emerges as a means of providing even more efficient access to online information, however a complication arises from this nexus with regard to creative practice. Rather than being capable of developing a 'truly encompassing' definition of each user, Google's algorithms are only currently capable of a 'generic individualisation' in which a

³⁰ According to McStay, many early advertising practitioners were influenced by the concept of scientific management (2010, p. 175), and, as mentioned in Chapter Three, influential mid-20th century practitioner James Webb Young advocated an assembly-line approach to advertising production.

generic vision of the searcher is used to pre-empt search results (Hillis, Petit & Jarrett 2013, p. 67). In effect, the individual exists as a category or profile group that receives similar, and thus standardised, search results. The results are delivered efficiently, however their relevance to the task at hand is questionable if practitioners seek exposure to diverse rather than popular and familiar sources of inspiration.

The Taylorist approach to the operation of Google search is actively promoted by a business and industrial culture that is marked by 'objective rationality, utility, efficiency' (Hillis, Petit & Jarrett 2013, p. 36). But despite the outward appearance of objectivity, use of the company's programs, and search in particular, tends to shape knowledge work practice. As Manovich points out: 'Technology is not neutral, its affordances impose the developer's values' (2001, p. 64). Hillis, Petit and Jarrett write that the humble search box has emerged as a 'symbol of efficiency' in the contemporary media environment (2013, p. 179). This symbolic benefit has been embraced to the extent that Google's model of search has become a form of industrial 'best practice' that is copied, not just in the form of algorithms and affordances, but in the social values it exemplifies (Hillis, Petit & Jarrett 2013, p. 35). The efficiency-focused mode of action presented by Google search becomes amplified and may inform everyday actions, including those that do not benefit from standardisation.

The standardisation implicit in Google search presents two key threats to the creative process: a loss of craft and a reduction in serendipity. The delegation of aspects of the act of information discovery and recovery to software that works to its own goals is likely to replace the techniques of the individual person that are central to the creation of new ideas. In the interviews it was found that some participants would browse the Internet rather than search for sources of inspiration – 'craft' in this instance involves the creative filtering of online content and annotating research material. This contrasts with using Google to search the Internet in the hope that this action will trigger an idea. In effect the often serendipitous process of browsing, of being a 'magpie', is being standardised to a process of using broad keywords or a question-and-answer approach to finding information. This suggests a loss of individuality as a result of the increasing influence of intelligent agents. Google

search's strategies of pre-empting and personalising search results are the result of generic individualisation rather than a nuanced understanding of the user or the task at hand.

Through the promise of efficiency, Google insulates searchers from the unexpected, a quality foreshadowed by Simpson when writing more generally on technological rationality:

Technology represents our quest for security against novelty, through control and order, while presupposing the possibility of novelty. It is the use of created novelty to forestall or defuse contingent novelty. In securing ourselves we want assurances against surprises, against an open and uncertain future. (1995, p. 54)

This perspective highlights a distinct opposition between technology use and principles of creative practice. When individuals or organisations adhere to the rationality encouraged by ICTs, creative work such as incubation – the internalisation of a problem to ‘freely and abundantly’ to make new connections (Griffin & Morrison 2010, p. 7) – can be regarded as inefficient. In the agency environment there is an acceptance that creatives ‘waste’ time on potentially fruitless or fruitful endeavours – for example, setting up a toy racetrack in the middle of the office. This type of action, deemed productive in a creative sense, is devalued because Google is able to invoke or retrieve content very quickly that can be used in response to a brief. Why set up a racetrack in the office to explore creative possibilities for an advertisement when you can easily search for and find a video of someone else doing it? The ideas that result from exposure to this online content may produce a novel outcome, yet it is likely to be closer to a ‘novel’ outcome produced by another creative team looking at the same source material. As such it would lack the particularity of experience that may result from the seemingly inefficient task of building a real toy racetrack. That is not to say that creatives exist in an environment without boundaries. Boden (1995) reminds us that creative practice follows rules and must work within constraints. However entropic experiences are also required to achieve creative breakthroughs.

What is lost when efficiency is privileged is the notion of serendipity, which Halavais (2009, p. 53) describes as emerging from ‘unstructured time’, an experience that is institutionally accepted by advertising agencies. This study's empirical findings suggest that the stages in Wallas' stage-based model of the creative process – and Young's version for advertising creativity – are followed but not in a sequential fashion. The study found participants conform to institutionally accepted work ‘routines’,

but these are predominantly ad hoc and include a number of individual and collaborative actions. It is the blending, breaking up or concurrence of these actions that ultimately accommodate unpredictability. In a comment that can be read as communicating a desire to achieve both efficiency and serendipity, one participant (Senior copywriter Jace) spoke of an organisational encouragement of 'failing fast', an acceptance that failure was a facet of the creative process provided the experience was handled efficiently. The Google corporation communicates this ethos not just through the social values embedded in its algorithms but also in the publicity surrounding its work practices. It has been widely reported that Google staff are allowed to allocate 20 per cent of their time to self-directed innovation. Google's 20 per cent model has since been revealed as less formal than first reported (Tate 2013), however it has resulted in one participant in the study imitating the organisation's approach by giving his creative staff a measure of time to work on non-client related creative projects. In both instances, experimentation is encouraged, however it is framed as an action that is strictly time bound. This ethos ultimately conflicts with participants' descriptions of the creative process as an ad hoc series of actions, and suggests that serendipity can be rushed or switched off or on when desired.

The Taylorist approach to information access exemplified by Google search is aligned with pervasive network logic that privileges the achievement of outcomes over process. Institutional acceptance of Google use as a creative process action accommodates the means–ends logic of technological rationality as described by Simpson, resulting in a further reduction of experience.

According to Simpson:

there is a tendency, pervasive in our instrumentally saturated culture, to reduce questions of meaning to questions of value, to translate talk about structures of meaning into talk about ends or goals. (1995, p. 43)

Efficiency-focused network society artefacts like Google search intensify this form of reductionism by automating research actions, and prioritise efficiency over the particularity of experience. However, as Simpson puts it, 'Utility cannot be an *ultimate* principle, for it will lead to an infinite regress which makes it impossible to assess the value of any given thing or action' (author's emphasis) (1995, p. 44). When translated back into practice, the implication is the encouragement of a 'question and answer'

relationship with information in which Google replaces the journey of discovery and the misadventures or mistakes that can occur along the way.

7.2.2 The accelerating culture of speed

Implicit in the value of efficiency is the concept of speed, or to be more specific, the measurement of speed. This is communicated explicitly in every Google search result page through its statement of the number of seconds the search engine took to process its index. In addition to the valorisation of efficiency, the valorisation of speed makes Google search an exemplary artefact of the network society, one that is capable of perpetuating the imposition of a means–ends structure on the creative process.³¹ According to Hassan: ‘Speed is the essence of the network society; it is what makes it possible. The pursuit of speed in the pursuit of profit drags people into its logic and compels them to constantly try to synchronise with “network time”’ (2008, p. 87). When considered in terms of creative process actions, the expectation of faster outcomes has the potential to limit the institutionally accepted unstructured periods of reflection in which new associations are both consciously and unconsciously formed.

The perception of time compression or a ‘speeding up’ of time – the expectation that more can be completed in the same amount of time – across the business world was reported by participants. One participant, senior art director Oliver, stated that shorter deadlines were the ‘spirit of the times’ rather than a particular feature of advertising production. This observation is supported by Hassan’s description of social changes evoked by the network society era in which, ‘Compression and acceleration come largely from outside the workplace but have an effect on shaping it’ (2008, p. 179). According to participants in this study, clients were the main drivers of time compression insofar as they had unrealistic expectations about how long it took to complete the creative process. This expectation, it was suggested, was an outcome of a misguided belief by clients that new media technologies reduce the time it takes to complete all parts of the creative process. In the eyes of the

³¹ Hillis, Petit and Jarrett state that speed has a strong organisational meaning for Google, ‘The concern with speed extends across the search industry, and speed, for Google, is a first principle, an ontological value of the highest order that drives its sense of corporate meaning’ (2013, p. 63).

participants, new media technologies only assisted in the speeding up of the production of mock-ups, the indicative layouts or draft advertisements presented for client approval. But while the use of ICTs to more quickly put together mock-ups³² is an obvious sign of technological change, the use of Google search within the creative process is also capable of contributing to the feeling of time compression.

As a primary portal used to access the Internet, Google search is capable of reducing the time it takes to collect the research materials – which takes place in the Wallas model's preparation phase. However, this can result in a 'domino effect' in which the speeding up of action in one field of practice is transferred into another and is experienced as an acceleration of time. As Hylland-Eriksen observes when writing on the time compression that results from new media use, 'If one gets used to speed in some areas, the desire for speed will tend to spread to new domains' (2006, p. 273). The outcome of a collectively experienced feeling of time compression is the institutional expectation that more actions, regardless of their individual nature, can be completed in a shorter period of time. Google's freeing up of time in one area may evoke a 'labour saving paradox': an increased feeling of being time squeezed due to an increased expectation that one should complete more actions. In his consideration of the social influence of intelligent agents in a general sense, McGregor Wise argues, 'agents cause more labour by increasing normative expectations. More can be accomplished with its help, so more *must* be accomplished' (1998, p. 423) (author's emphasis). As mentioned previously, creatives have traditionally been afforded considerable autonomy, yet social forces beyond the advertising agency are changing the structure of the workplace; an increase in the speed of activity is an unavoidable and self-perpetuating condition.

A labour saving paradox encouraged largely from beyond the individual organisation is further supported by the near-instantaneous nature of Google. As Simpson points out, 'Technology seeks to minimise the time necessary to realise a given goal, thus liberating us from "the burden of having to wait"' (1995, p. 23). Being able to quickly find online content using a search engine is an affordance search users come to expect, with few having tolerance for a blank page. Writing on the culture of

³² The production of mock-ups or storyboards for client consideration was generally not considered to be a distinct phase of the creative process but rather than outcome of it.

Google, Hillis, Petit and Jarrett argue that the delivery of near instantaneous search results exemplifies a network logic of immediate gratification of desire, a socially prevalent value that in turn encourages the expectation of faster decision-making (2013, p. 72). If, as Hillis, Petit and Jarrett propose, the search engine box has emerged as a contemporary symbol of efficiency, a supplementary feature of the search engine, Google Instant,³³ could be considered a symbol of speed. Google Instant reveals search terms before the user has completed or often fully considered a search term.

The imposition of the value of speed on the creative process challenges institutionally accepted creative process tasks that do not involve software use. One of these actions is the allocation of time for reflection, which is at risk of being diminished. As Lash suggests when discussing online content in a more general sense, 'There is no time to escape information order, thus critique of information will have to come from within the order' (2002, p. vii). With regard to the use of adaptive search engines, the new order becomes a generically individualised flow of information that is delivered so quickly there is little space between impressions to consider context and meaning. According to Hassan, 'Our ability to perform tasks involving critical thinking, especially, suffers because to think critically means to reflect and concentrate, and to devote the *time necessary* to a particular problem' (2008 pp. 183–184) (author's emphasis). Models of the creative process have confirmed the importance of reflection. While elaborating on his linear model of creativity, Young (2003) discusses the importance of periods of rest when the subject is dropped and ideas are left to incubate, and Csikszentmihalyi (2014) notes that the allocation of enough time to be idle is fundamental to the ideation stage. When these periods are removed an alternative approach to ideation that is driven by immediacy takes their place.

Lash uses the metaphor of play to explain the effects of accelerating access to online content that is intensified by adaptive search engines. According to Lash, when information access is characterised

³³ Google Instant, an ancillary function of Google search, offers both a highly visible and a largely ignored manifestation of the technological subconscious concept introduced in Chapter Two. This application enables the auto completion of search terms by revealing popular associations as the searcher enters a word into the search box. In this instance, needs are realised before they are consciously articulated, thereby laying the search engine's intent over that of the searcher. Of course the searcher has the option to choose one of the options put before them or to complete the search term themselves, yet in the context of the culture of efficiency perpetuated by Google it is likely many searchers merely accept the association provided, embracing a default action that takes them down the path of least effort.

by immediate experiential relations the user moves into a 'world of play' in which the subject and object are deeply intertwined.

To play is to be so interested, so involved immediately as to rule out the possibility of judgment. Judgement involves always a separate and neutral instance. It presupposes a culture of representation. Play ... does not involve this. (Lash 2002, p. 160)

Accordingly, the Taylorist paradigm perpetuated by the use of Google search does not just reduce the time allocated to research actions, but its immediacy crowds out the time required to reflect on the materials collected. This argument is supported by the observations made by participants that a reduction in time for the creative process has the greatest impact on periods of deliberation and refinement. In other words, these are the first actions to be discarded when a short deadline is imposed. When time is reduced through the imposition of the network logic of speed these actions are similarly at risk. Participants commonly noted that new associations often come quickly, however the novelty and appropriateness of a creative concept rely heavily on the creative process actions that come after an embryonic idea has been identified.

Emerging uses of Google search that extend beyond traditional research actions are likely to perpetuate this trend. Castells argues that in the network society 'new information technologies are not just tools to be applied, but processes to be developed' (1996, p. 32). This observation is apt with regard to analysis of practitioners' descriptions of how Google search is used as an evaluation tool. It emerged through interviews that some participants apply a 'Google check' to confirm if an idea is original. This test for originality emerges as a form of evaluation that focuses on speed and has the potential to crowd out other slower evaluative measures. Senior art director Jace spoke of undertaking an 'overnight' test to evaluate the quality of an idea or to allow it to be refined. However, unlike the 'overnight test', which inserts space for deliberation, the 'Google check' results in an immediate and somewhat different form of verification that is capable of growing in prominence due to its superior speed, reach and scope. At the moment, practitioners determine when they wish to do a 'Google check' and how it occurs within the search model, however that could change shortly. Castells argues that the network society is characterised by the application of knowledge and information to knowledge generation and feedback (1996, p. 30). In other words, new technologies don't just assist their users;

the technologies build their own knowledge by monitoring and learning from how they are applied in practice. This knowledge is then used to improve software functioning. The 'feedback loop' that exists between Google search and its users allows the program to continually improve its pre-emptive capacities and extend its affordances. At some point Google search may be able to recognise that a practitioner is undertaking a 'Google check' for originality and respond accordingly.

7.2.3 When flexibility means more work

The creative processes described by the participants reveal the importance of institutionally accepted workplace rhythms that encourage periods of reflection rather than an assembly line approach to production. However, these traditional rhythms are being challenged by the blurring of boundaries between the professional and private worlds of advertising creatives as a result of a broader social acceptance of the network society characteristic of flexibility. A change in work patterns is being accommodated by adaptive search engines and software more generally, which provide creative workers with newer forms of flexibility by allowing them to work outside the office environment or alternatively to take a break from the creative process at work by pursuing personal interests via ICTs. Yet under the paradigm of informational Taylorism it can be argued that emergent forms of workplace flexibility ultimately result in the construction of a more rigid structure of creative practice in which flexible work rhythms contribute to a cycle of more work being expected and thus further reducing the time allocated to unstructured periods of reflection.

The practitioners in this study stated that self-determination of creative process actions is institutionally accepted. Creative workers are of course subject to internal and client deadlines, however they are given a high degree of autonomy in the way they develop new ideas. This flexibility extends to the spaces in which creatives choose to work, with study participants mentioning the freedom to leave the office to work on a brief to avoid distraction. However, the intervention of mobile adaptive technologies means traditional rhythms that accommodate unstructured periods of deliberation are being reshaped. The creative worker can leave the physical workplace however they remain tethered through the use of communicative technologies. No matter where a practitioner is

physically located, access to adaptive search is provided by ubiquitous ownership of smart phones and other mobile devices. Rather than having an idea and thinking through the possibilities, creatives can continue to draw content from the online environment.

Within the office environment practitioners are given the flexibility to use ICTs to pursue their own interests. Just as Google is deployed away from the office for work purposes, it is also used at work to access online information on personal interests, an activity that is institutionally accepted in a flexible workplace. Yet the speed and convenience achieved by using Google for non-work-related interests further alters traditional work rhythms and may result in a feeling of distraction or a lack of focus; this was noted by those participants who said they used online content as a means of having a break from work to clear their minds. What emerges is a network logic in which the feeling of distraction or lack of focus as a result of changes to workplace rhythms is 'cured' by further immersion into the online content. There was some recognition by participants of the dangers of mixing work with personal interests, yet new rhythms involving the use of ICTs to take 'breaks' at work appear to be an unavoidable influence on contemporary creative practice.

Rather than occurring as a result of a top-down directive from management, Google's values of efficiency, speed and flexibility are being collectively self-imposed by participants who choose to adopt these technologies as part of their creative process. The autonomy provided to creative staff noted in this study reflects Bilton's discussion of creative workers more generally. He writes that, 'Managers are warned from "meddling" in the creative process because their rules and rationality have no validity in the world of art and innovation' (2007, p. 8). This institutionally accepted absence of management 'meddling' with creative workers is likely to be amplified by a wider change in organisational hierarchies, identified by Castells, from vertical to horizontal management structures as a means of adapting to rapid technological change (1996, p. 164). The implication is that layers of management act as a barrier to the speed of action required to succeed in contemporary business. In the context of advertising production, this leaves creative workers with even greater scope to self-determine their everyday tasks. However analysis of the empirical data suggests this self-determination is influenced by creatives' use of new media technologies. One participant noted a social

'pressure' to embrace new technologies and another described the willingness of colleagues to 'jump onto the latest technologies for the sake of it' (senior copywriter Andy). This represents a departure from Taylorism in its pure form, which placed managers at the core of the decision making process. What we can see here is the emergence of a different form of 'manager', intelligent agents that manage tasks on our behalf on the basis of knowledge of our previous behaviours. As these technologies are self-imposed rather than the result of management directives, the social values embedded in intelligent agent technologies that encourage a 'one best way' approach to fulfil a given task become all the more capable of folding into practice in a general sense.

In summary, increasingly pre-emptive technologies, such as Google search, bring clear benefits to the creative process yet simultaneously impose values that conflict with participant descriptions of creative process best practice. An unplanned consequence of their use is a tendency towards the standardisation of the creative process. While participants were commonly critical of search engine use as a means of finding the 'answer' to a creative problem, analysis of their perceived use of Google suggests the ICT is performing a burgeoning role in the creative process. Its influence however goes beyond the role of a gatekeeper with a knowledge of user preferences; it has come to exemplify both the philosophy of technological rationality in which efficiency, speed and flexibility are prized at the expense of reflection, and also the acceptance and perpetuation of these social values by creative workers themselves rather than through management imposition.

7.3 Collective intelligence and creative practice

The systems model of creativity provides a means of understanding the relationship between art directors and copywriters and the sources of inspiration drawn from the sociocultural domain that assist in the production of creative outcomes. This section examines the influence of Google search, a software platform that applies the 'collective intelligence' of the Internet users to assist the individual searcher to discover new information and recover existing information – actions that are capable of triggering new associations between incongruous ideas to form a novel message. It is argued that the intelligent agent capabilities of Google search accommodate a subtle reshaping of the creative process

that may add largely unrecognised layers of difficulty to the everyday tasks of art directors and copywriters.

7.3.1 Google's application of collective intelligence

The concept of collective intelligence is central to understanding the influence of Google search on the information discovery and recovery actions that occur throughout the creative process. Collective intelligence describes social knowledge that arises from the sharing of 'memory, imagination and experience' (Levy 2001, p. 15). According to Flew, it is the result of:

the capacity of networked information and computer technologies (ICTs) to exponentially enhance the collective pool of social knowledge by simultaneously expanding the extent of human interactions enabled by communications networks, and providing a vastly greater capacity to generate, codify, store and retrieve knowledge through collective access to network databases. (2014, p. 19)

This conceptualisation suggests collective intelligence, with its ability to process, store and recall knowledge, is capable of functioning as an external 'brain'; the socially determined memory of the domain as described by Csikszentmihalyi. Kevin Kelly has applied the external brain metaphor more explicitly with the concept of a 'hivemind', which was imagined a technologically 'distributed memory that both perceives and remembers'. (1995, p. 19). Hillis, Petit and Jarrett have noted that the idea of a world brain has a lineage that runs from the work of science fiction writer H G Wells to the development of early academic citation systems and, more recently, the creation of Google search. Wells' world brain was conceived as a world encyclopaedia to 'hold men's minds together' (1938, p. 35), however this model lacked a clearly defined indexing system. More recently, the algorithmic approaches developed by Eugene Garfield to measure the importance of scientific research based on the number of times it had been cited in published documents has been identified as inspiring Google's PageRank algorithm (Page et al. 1999; Battelle 2005; Hillis, Petit & Jarrett 2013). An understanding of the conceptual lineage of one of Google's primary information retrieval and retrieval mechanisms highlights the on-going desire to merge human and technological cognition.

While numerous ICT platforms employ collective intelligence, Google search's position as the most visited website in North America, Europe and Oceania (Information Geographies 2014)

demonstrates the importance of examining this concept.³⁴ In effect, Google has come closest to H G Wells' world brain vision by attempting to make 'all' information available through a single and seemingly universal knowledge platform (Vaidhyathan 2011, p. 63). This sentiment is reflected by Google's aim to 'organise the world's information and make it universally accessible and useful' (Google n.d.b, para. 1). Google search aims to go beyond what is currently contained by the Internet to organise the world's information – all published works – and to present it in a form that renders this information available to everyone with Internet access.³⁵ This capacity is extremely useful to advertising creatives. Some practitioners in this study made the point that contemporary advertising creatives perceive the Internet as providing unprecedented access to an immense repository of cultural representations that can be used to inspire new ideas. Google provides access to the cultural memory of the domain through a filtering mechanism that relies heavily on harnessing the collective intelligence of the Internet to predict the intent of searchers. As discussed in Chapter Two, the PageRank algorithm analyses the number of in-bound links to a page to determine its popularity in a collective sense, while personalisation algorithms place users into groups of people with similar online behaviours to predict and pre-empt future behaviours.

Both the systems model of creativity and this study's empirical findings highlight the relationship between exposure to diverse sources of information and the ability of practitioners to achieve novel outcomes. The systems model draws attention to how cultural representations are accessed from the domain system while also identifying the influence of the individual creators' own personal experience and knowledge in the collation of this information (Csikszentmihalyi 1988). In addition, participants commonly noted a desire to collect a large amount of research material on an on-going basis to achieve novel associations. This reflects Sawyer's observation that 'Creativity involves being aware of a wide variety of information in your environment, and being able to spot opportunities to link new information with existing problems and tasks' (2012, p. 96). Young also

³⁴ It is worth noting that unlike many other artefacts that employ collective intelligence, such as Wikipedia and open source software, the existence and nature of Google's application of collective intelligence is largely unknown due to lack of conscious self-organisation and involvement by content producers (Ickler 2010, p. 27).

³⁵ However, this aim is limited by a series of factors including the language in which this information is presented and the use of firewalls by some countries.

highlights the value of exposure to information that exhibits a qualitative diversity by noting that successful advertising creatives have an interest in ‘everything under the sun’ (2003, p. 40). However, this relationship with information is being re-shaped by Google’s central role in the acts of information discovery and recovery. Its model of search influences the tasks both of locating new information and remembering known information by prioritising the familiar and popular, actions which do not align with the principles of the creative process.

7.3.2 The influence of Google on information discovery actions

Google’s PageRank and personalisation driven model of relevancy has been successful to the extent that it is now more common to ‘search’ than ‘surf’ the Internet. Under the surfing or browsing model, users make conscious decisions to move from one link to another based on their anticipation of what lies beyond a hyperlink. For instance, when reading a post on Atlas Obscura³⁶ about a church that displays wax limbs, a creative may notice a post on a particular architect (Odedina 2015); clicking a link within that post leads to a biography of that architect, a baroque master, which in turn may lead to finding other examples of churches built by that architect, which could then lead to learning about a particular saint depicted in a church’s antechamber. In this scenario, online media is navigated as a result of conscious decisions made by the person, based on anticipation what sits behind each link. As mid-weight art director Hannah put it, creatives are able to explore ‘new little paths’ that expose them to unexpected sources of inspiration. When Google search is employed, the user’s intention is pre-empted by the search engine’s largely opaque algorithms, an automation of web surfing in which a search term is associated with pages that have been identified as popular and generically reflective of the searcher’s previous behaviours. At face value this presents a significant saving of time. However, the practitioner’s opportunities to be ‘active and alert to opportunities relevant to your problems’ during the creative process are diminished (Sawyer 2012, p. 96). The private associations involved in gathering new information are replaced by near-immediate exposure to Google’s collectively developed associations, the ‘technological subconscious’ introduced in Chapter Two. Google’s search

³⁶ www.atlasobscura.com

results are not derived from human decisions about categories of knowledge but instead are presented as information without a theoretical, cultural or historical context. It is information without a backstory.

The empirical component of this study revealed that Google search is used in varying degrees as both a direct and indirect means of developing the many, often incrementally developed associations that are subsequently narrowed down and further adapted to form a final novel outcome. The direct application of Google to the development of new associations was mentioned by a small number of creatives, who discussed the entering of 'random' or unrelated words into Google's search box to generate unusual associations in the search results. The unusual association itself, or online content based on these associations, were then used to develop further associations that were either discarded or incorporated into a creative concept. For instance mid-weight art director Hannah discussed placing the question 'What if I cut off my hair and go into the snow?'³⁷ into the search query box to see what emerged. In effect, Google is developing novel associations on behalf of this creative that are then either refined or discarded. Another more commonly discussed and less obvious form of association making involves the use of Google to access online content pertaining to a particular task when personal knowledge or experience is exhausted. In this instance, analysis of participant descriptions suggests that art directors or copywriters, rather than properly delimiting a field of knowledge, enter vague, broad or incomplete search terms into Google's search box. In this instance they are 'fishing' for inspiration. Consequently, Google's algorithms are employed to pre-empt the user's search intent and, in effect, to automate the user's creation of their own associations. When this occurs the search engine delivers conventional associations, and opportunities to trigger novel idea are diminished, something that is fundamentally different to subjective association. An example is senior art director Steve's search query for 'cool beer labels' when responding to a brief for a beverages client. While this search may be part of an initial process of understanding potential competitors, it also indicates a tendency to conform to existing approaches if this is the only means of seeking out sources of inspiration. A

³⁷ As discussed in Chapter Six, the posing of questions emerged as one of the two main search strategies discussed by participants, the other being the typing of broad search terms that were then refined after search results were presented.

reduction in opportunities for the construction of new associations when navigating the Internet is just one outcome of Google's role as a technological subconscious. Another significant change to information discovery actions within the creative process concerns the nature of the indexed web pages presented to searchers.

Rather than achieving access to all parts of the web, as indicated by the 'world brain' metaphor, search results are prioritised according to the notion of relevance. Google's PageRank³⁸ algorithm determines its version of relevance by placing websites that have been linked to the most by other websites at the top of its listing of search results. In effect, this is a quantitative measure of the popularity of web content that is used to pre-empt the relevance, or usefulness, to the searcher. This is indeed useful to creatives when they are consciously attempting to understand what is considered to be popular to an audience, in other words, to understand mainstream culture. However the mainstream lies in opposition to the unconventional or unusual. When discussing their research actions in a general sense, participants stated that access to diverse sources of information was important to them. The implication drawn from this finding, one supported by literature on the creative process (Young 2003; Sawyer 2012), is that novel inputs encourage novel outcomes. Participant discussion of how Google filters its search results indicates a limited awareness of how search results are constructed, with some believing the search engine presents an unmediated channel of communication – a perception perpetuated by Google (Hillis, Petit & Jarrett 2013, p. 37). However Google's bias towards the popular also serves to limit users' exposure to unusual or unconventional sources of inspiration. It is a case of quantitative popularity trumping qualitative diversity. Of course, Google is a generalist search engine that aims to offer universally palatable results and was not designed specifically for the creative process.³⁹ Yet despite the desire of some participants to avoid

³⁸ As discussed in Chapter Two, PageRank treats inbound links to a website as 'popularity votes' as a means of quantifying the usefulness of a webpage to searchers.

³⁹ Although that is not to say that Google is unaware of its influence over the production of marketing communication messages. The organisation's website 'Think With Google' (www.thinkwithgoogle.com) provides articles on advertising creativity in addition to more general content on audience behaviour. The naming of this source of content alludes to a desire to work in collaboration with marketers to form connected ideas.

exposure to online content until an idea has been formed, it is clear that Google, as a primary access point to online content, plays a significant, albeit largely unrecognised, role in the creative process.

Google's focus on the presentation of quantitatively popular search results can be linked to globalisation and cultural imperialism but its main directive is the universalisation of information, a goal reflected by Google's mission to globally democratise online content. This is occurring, according to Vaidhyathan, through a process of 'infrastructural imperialism' in which information flows are controlled on a global basis (2011, p. 109). Large network companies, such as Google, Facebook and Twitter, become the mediums through which most non-face-to-face communication is conducted, and have the capacity to flatten out communicative differences. It would appear that this infrastructural shaping of information also has an affect on what we read, listen to and watch, in other words, the content of communication. This is reflected in Google's mission to make all of the world's information 'universally accessible' (Google n.d.b, para. 1), an outcome that art director Geoffrey indirectly noted when discussing his use of the search engine to find inspiration from Danish fashion boutiques that could be translated to Australian fashion campaigns. However, the search engine is ultimately less a complete repository or 'world brain' than it is a form of mass media with inherent biases. Importantly, Google's application of collective intelligence to rank search results privileges the views of those cultures with the most content producers, established web sites over the new, and dominant beliefs over the divergent. Inherent in Google's goal of the universalisation of information is the notion that all users are fundamentally the same, an observation supported by comments made by former Google CEO Eric Schmidt:

The most common question I get about Google is 'How is it different everywhere else?' and I am sorry to tell you that it's not. People still care about Britney Spears in these other countries. It's really very disturbing. (cited in Vaidhyathan 2011, p. 108).

The judgement, one suggestive of tabloidisation, highlights how the filtering and dissemination of information across geographic boundaries results in a shrinking of access to cultural difference. In effect, a bias towards English language content and content produced in the US intensifies the existing

social conditions that shape creative advertising in an Australian context.⁴⁰ We use Google and other networked technologies because they facilitate communication but in the act of facilitation they also align the individual user with a global network of users who start to develop similar interests. This practice runs contrary to the expansive conception of web-based technologies that are often discussed in terms of opening the individual to a whole world of new ideas.

The relationship between Google and advertising creatives that results from the search engine's control of access to the domain is, to borrow from Levy when discussing the nature of collective intelligence more generally, 'complex and ambivalent' (2001, p. 11). As a primary point of access to online content it provides a convenient means of understanding audiences yet it is also capable of limiting the qualitative diversity of the research materials drawn into the creative process. Perhaps in response, many participants expressed ambivalence towards the search engine; they reported that it is widely deployed but also believed its use can result in derivative and thus inferior creative outcomes. This relationship suggests a level of dependence that is exacerbated by the fact that Google's model of search has evolved as 'industry best practice' (Hillis, Petit & Jarrett 2013, p. 35). Because other major search engines have replicated Google's algorithmic approaches there appears to be little incentive to use those other search engines, and instead there is a tendency to rely on the platform that 'led the charge' (Hillis, Petit & Jarrett 2013, p. 35). Another possible explanation for participants' continued use of Google, despite being wary of its influence over ideation, is a faith in technological progress that has not subsided in the move from industrial to informational capitalism (Simpson 1995). Google exists in a constant state of innovation, a condition that has been naturalised amongst users who are accustomed to continual change and innovation. Indeed, one of the most significant innovations developed by Google, the introduction of personalisation algorithms (Feuz, Fuller & Stalder 2011; Pariser 2011), has seen the search engine further establish its position as a model of best practice within its field.

⁴⁰ Robert Crawford's book *But Wait, There's More ... A History of Australian Advertising, 1900-2000* (2008) documents the industry's adaptation of American models.

It could be argued that Google's personalisation algorithms seek to counterbalance PageRank's prioritisation of the most popular search results. As discussed in Chapter Two, personalisation is achieved through the collection of data about the user's interests, social relationships and location. A commonsense reading of personalisation would suggest there is a relationship between the amount of data collected by the search engine about the user and the level of personalisation inherent in search results. However while the search engine is in a position to build sizeable user profiles, it is not possible for Google to establish the complete picture of a user's intentions, preferences and desires that would be necessary to develop truly individual predictions. Accordingly, personalisation algorithms are confined to making an approximation of the searcher's intent (Hillis, Petit & Jarrett 2013). This contention is supported by an empirical study of Google search's personalisation by Feuz, Fuller and Stalder in which user information is compiled into a profile that is then associated with particular groups: 'Rather than seeing what is of most interest to the user as an individual, we are presented with a preselected image of the world based on what kind of group the search engine associates us with' (2011, para. 60). It is this allocation of group characteristics to individual users that allows the search engine to fill in any gaps in its knowledge of the individual searcher when making predictions. Hillis, Petit and Jarrett (2013, p. 64) describe this situation as a push-pull between the collective and the personal that has the tendency to further homogenise search outcomes amongst groups of individuals who present similar characteristics.

Feuz, Fuller and Stalder (2011) argue that an adherence to a set of pre-stated preferences results in a self-fulfilling prophecy. Being limited in access to content that has been tailored to a specific group means that the user is more likely to conform to that pre-determined vision that has been established for them. Consuming the information or linking to it when producing content further confirms its algorithmic relevance to both the group and individual. This phenomenon is conceptualised by van Dijk as an 'information prison', one in which inmates who are perceived by the search engine to have similar characteristics are locked in the same cell (2006, p. 231). It could be argued that generic individualism has the potential to intensify existing social conditions. For example, participants in this study noted a 'fixation' with advertising and design blogs amongst Australian

advertising creatives that was capable of having an ‘echo chamber’ effect due to limited exposure to divergent cultural representations. It is worth noting that this form of replication is not necessarily a conscious action. Mid-weight copywriter Xavier said he believed the majority of creatives did not set out to copy existing work, but instead were inadvertently influenced by what they had been previously exposed to and forgotten, a form of unconscious plagiarism. Advertising creatives have for many decades observed the trends presented in award books and industry publications, however exposure to industry-focused content may be intensified and perpetuated by Google’s pre-emptive personalisation. When groups of users are profiled by Google as being interested in advertising industry blogs, similar content is likely to be featured in future search results, thereby perpetuating the exposure to the popular within these particular user profile groupings. When this occurs Google search makes it more difficult to forget the known or familiar.

Web search personalisation in its current form lacks nuance with regard to the user’s purpose. Participant descriptions of their use of Google indicate the search engine is used for both information recovery and information discovery purposes, however Google’s current pre-emptive capabilities do not distinguish between these two modes. Hillis, Petit and Jarrett (2013) point out that the application of personalisation algorithms to pre-empt the searcher’s intention lend themselves to information recovery rather than information discovery because they refer back to the user’s previous behaviours to make predictions. For instance, analysing known interests provides a useful means of bringing information that has been previously viewed, or information that is similar to what has been previously consumed, to the user’s attention. Pariser (2011) argues that search engine personalisation can result in exposure to the ‘adjacent unknown’, information that feels new but isn’t.

Personalization is about building an environment that consists entirely of the adjacent unknown – the sports trivia or political punctuation marks that don’t really shake our schemata but feel like new information. The personalised environment is very good at answering the questions we have but not at suggesting questions or problems that are out of our sight altogether. (2011, p. 91)

Rather than broadening experience and knowledge, the adjacent unknown keeps the searcher trapped within their own sphere of reference and precludes what could be described as the distant unknown. For instance, senior art director Oliver stated that his organic search results often referred to two of

his interests, surfing and playing guitar. In this instance he is continually drawn back to the known even when seeking to broaden his knowledge. Oliver was aware of this influence largely due to the currently blunt nature of Google's pre-emption, however as the amount of data collected about the individual increases so will its precision, thereby making the search engine's generic individualism more difficult to identify.

Feuz, Fuller and Stalder (2011) state that search engine personalisation is only capable of achieving limited pre-emption,⁴¹ however this capability points to the potential for more significant influence in future iterations. While the concept of personalisation can be conceptualised as a perpetual 'work in progress' that currently exists in embryonic form, it is unlikely the conditions required to achieve a fully accurate approach to personalisation will ever be achievable. In an evaluation of the capabilities of intelligent agents, van Dijk observes:

Intelligent systems are able to adapt to changing user preferences. However, people's standards, values and emotions are changing fast. And what is more, they differ depending on innumerable contexts. They cannot be entirely (pre-)programmed. (2006, p. 201)

While future technologies will be able to process the significant amount of data required to more effectively pre-empt a searcher's intention, an understanding of the context in which that intention exists is a much more difficult proposition. Accordingly, it is likely that Google search will continue to make predictions based on user categories to fill in the gaps in the search engine's data and, as a result, limit search results to information that reflects a pre-determined and to some degree generic profile.

7.3.3 The influence of Google on information recovery actions

The act of drawing on previous experience and knowledge was commonly perceived to be a stronger approach to ideation than a conscious search for materials that could trigger the development of new associations. The latter is more likely to result, according to digital art director Jeremy, in the appropriation of 'someone else's idea'. However the systems model of creativity tells us that new associations don't develop in isolation from the environment in which the creator operates.

⁴¹ In their 2011 article 'Personal Web Searching in the Age of Semantic Capitalism: Diagnosing the Mechanisms of Personalisation', the authors state that personalisation in its current form was limited to the re-ranking of already highly ranked search results.

Information must be drawn from the domain system at some point. When participants discuss the importance of on-going research they are highlighting the value of remembering what has come before – sources of inspiration drawn from the domain. The use of notebooks by several participants to store sources of inspiration and new associations reveals the importance of the role of memory aids. A small number of practitioners described how they habitually used mobile phone applications, such as Evernote, or physical notebooks to document thoughts, sketches or imagery that could be deployed in the future. The action of recalling past cultural representations, however, appears to increasingly involve the application of Google search. Participants described deploying a search engine as a memory aid as an action that took place within the creative process due to the search engine's speed and convenience. The use of a search engine in this fashion implies the perception that Google is reliably faster than biological memory and provides access to all the world's information in its role as a 'world brain' (Hillis, Petit & Jarrett 2013, p. 112). As Oliver's comments indicate: anything forgotten can immediately be remembered through Google. However, with regard to the creative process this utility comes at a cost.

The drawing of memory into consciousness by seeking the assistance of others, generally in an unspoken arrangement, is a common social action. According to Wegner and Ward, the sharing amongst a group of the act of recall, or transactive memory, 'avoids needless duplication of effort and serves to expand the memory capacity of the group as a whole' (2013, p. 58). Members of the group are called upon when their specific area of expertise is required, an act that allows the seeker of information to concentrate on the task at hand. For instance, a copywriter writing a radio script who forgets an obscure place name may ask a colleague or friend who is fascinated with geography to apply their memory so the copywriter can remain focused on the main task. In its role as a 'world brain' or 'universal encyclopedia' Google positions itself as a transactive memory that harnesses the collective intelligence of the Internet. Unlike colleagues, friends or families who can be called upon as a transactive memory partner, Google search is accessible at all times and immediately responsive, qualities that tend to lead to a greater reliance on this external memory.

Two unintended consequences arise from the application of Google search as a primary means of recall in the creative process of art directors and copywriters: the inability to distinguish between collective and private memories, and the decontextualisation of memory. With regard to the former, Wegner and Ward (2013) discuss a series of empirical studies that suggest that habitually using ICTs as transactive memory partners can lead the user to confuse private memories with those developed by their technologies.⁴² With regard to Google search, this outcome may not necessarily be surprising given the application of personalisation algorithms to approximate the user's search intention. However, the inability to distinguish between collectively determined memories and personal recollections suggests an emergent challenge for producers of creative advertising who strive to produce original outcomes. Importantly, a habitual reliance on transactive memory can place creatives in a position in which they perceive externally developed ideas or associations as their own work. Unintentional plagiarism or cryptomnesia copying can result. The removal of the private contexts inherent in the biological act of memory storage and recall emerges as a second consequence of using Google as an external memory. Speed and convenience are obvious outcomes of using Google as a mnemonic aid, however diminishment of the particularity of experience presents itself as a condition that does not align with creative practice.

Despite sharing the same name, significant differences exist between biological and technological memory. While much is still not known about the intricacies of brain functioning, there is a sense of agreement that memories are not stored as singular entities in one part of the brain, but as composite and abbreviated objects (Kandel 2006). The act of remembering requires these various threads of memories to be constructed into a conscious representation through a process of contextualisation. Rather than existing as a mirror image and static representation of experience, Stein (2013) notes that what is stored by the human mind changes over time as new information is absorbed. In contrast to the fluidity and subjectivity of the memories stored in the human mind, 'digital memories' – such those brought into the searcher's consciousness by Google search – exist as

⁴² Other studies suggest Google's role as a transactive memory partner encourages people not to remember information that they will need again but to instead remember where they access information (Sparrow, Liu & Wegner 2011).

finite and static representations. However, it is worth noting that this is not only a function of Google but also of the fact that inscription into any symbolic code, including natural languages, erases the temporality of thought and expression.

The participants in this study indicated that Google was often used as a means of recalling personal information and memories. Senior art director Miles, for example, discussed his use of Google to remind him of the details of childhood memories, such as watching television programs in the United Kingdom. While the beneficial nature of immediate access to a repository of information and memory triggers is obvious, the influence of imperfectly shaped human recollections is diminished. When Miles is exposed to online content brought to consciousness by Google's pre-emptive and personalised search results he is being exposed to an amalgam of collective (and standardised) experience that may replace some of his own fluid representation of a childhood TV program, that might otherwise have been shaped by subsequent experiences such as becoming a father or emigrating to Australia. In addition, the immediate act of recall through Google search can delimit associated memories, such as the children he watched the TV programs with or the room in which they were watched. In effect, Google will allow Miles to remember but in a way that is not inflected with his own experience.

Exposure to a collectively understood memory can be useful when replicating a text, for example if Miles is seeking to produce a homage to a television program. However in its networked inscription, the program that Miles remembered, a representation that changes over time and is shaped by associated memories, will be supplanted by a collectively standardised presentation. When two creative teams use the same uninflected cultural representation at the same time in advertisements for different brands the audience is presented with sameness rather than a surprising and thus memorable message. It is worth noting that the level of entropy or redundancy contained in the resultant creative concept depends on the way in which digital memories are used in the creative process. A source of inspiration gathered from a popular YouTube video could be linked to another concept to create a novel variation, however a reduction in subjective remembering increases the possibility of similar outcomes being created and similarly adapted by different creative teams.

Participants did not articulate perceptions of a loss of memory based on personal experience as a result of using Google as a memory aid, however it is possible that this reduction of subjectivity is another reason behind the normative desire of many participants to avoid the use of ICTs until after an idea is formed.

7.3.4 Google's relationship with postmodern advertising

The relationship between the production of postmodern advertising and the use of Google search in the creative process emerges as another possible explanation for participants' concern about the influence of the search engine on their creative practice. As discussed in Chapter Four, postmodern advertising is a dominant aesthetic and technique in contemporary advertising, an approach that encompasses the use of uncertainty, irony, pastiche, parody and irrationality (Davidson 1992, p. 197) to attract the attention of the audience and encourage brand recall. The construction of postmodern advertising relies heavily on the collection and reuse of cultural representations gathered from the domain to develop a heavily intertextual message, and this contrasts with the modernist approach that seeks to impose an individual style on each message. Knowledge of the domain is important for the construction of all approaches to advertising, however postmodern advertising, with the concept of recycling at its core, emphasises the conscious gathering and rearranging texts. Postmodern advertising commonly appropriates popular culture texts such as films, television, YouTube videos and other advertisements in the name of parody to create a new message. In the converged media environment it is an approach that benefits greatly from the application of Google search, which can retrieve texts across multiple platforms. However, there are some unintended consequences in that a search engine is likely to retrieve results that others with similar profiles are using and thus reduces the scope of the domain.

While participants did not use the term 'postmodern' when discussing their concerns about the use of Google search or online media more generally, the pitfalls of being 'overly derivative', using 'existing ideas' and 'copying' were commonly discussed. For example, senior art director Miles spoke about watching films and television programs and being able to identify which scenes would be

repurposed for future advertisements. He described this form of appropriation as 'lazy'; however this practice, one facilitated by software in the converged media environment in which participants are readily, and often pre-emptively, exposed to cultural texts, could be described as the application of a postmodern approach – in the form of parody or pastiche – that achieve a novel effect. Miles' observation could reflect the romantic vision of creator as lone genius, or alternatively it may imply a concern that relying on a particular channel for sources of inspiration or an approach to ideation can diminish the creative effect of the resulting advertisement.

A key difference between postmodern and modern approaches to advertising production revolves around how cultural texts drawn from the domain are applied. The modernist sensibility, with its goal of producing an 'original' narrative, sits in contrast to the recycling or imitation of past representations that defines the postmodern. Johar, Holbrook & Stern's (2001) empirical study of how advertising creatives produce novel advertisements exemplifies this difference due to its inadvertent focus on modernist approaches to advertising creativity. The study's observation of the ideation actions of art directors and copywriters concluded that advertising creativity is an outcome of presenting narrative patterns in a novel fashion. However, the cultural symbols used to tell a story within these structures were not drawn consciously from the domain but were instead developed from within the creator's memory.⁴³ This differs from a postmodern approach, which requires sourced materials to be consciously collected from the domain. An emerging complication is not so much that ICTs are used, but that the convenience and speed of Google search will encourage over-reliance on using it to collect references and diminish the value of drawing information from the creatives' experience and knowledge. In other words, the mixing of styles indicative of the postmodern aesthetic and technique becomes less about the creator's inflection and more programmatic. YouTube is a platform that applies personalisation algorithms similar to those of Google search, and mid-weight art director Hannah discussed the influence of YouTube videos on advertising creativity. She observed the same cultural representations appropriated from popular online videos emerging at the same time in

⁴³ The practitioners under observation were not described as accessing external sources of research or inspiration as part of the creative process.

several different advertisements. This recycling of the same source text by several creative teams results in a reduced entropic effect for the completed advertisements – they become predictable to the audience and no longer capable of ‘breaking through the clutter’. While the personalisation algorithms of search engines are still limited in their capacities, the possibility exists that these practitioners are being drawn to the same source material within the domain because they have similar search profiles or histories. This trend is supported by the growing prominence of Google search as a primary gateway to online content in practitioner’s lives. Indeed, in personal and professional life contexts, inside the office or away from it, Google search is available to provide its particular window onto the world.

In summary, both the systems model of creativity and the stage-based models tell us that exposure to the domain in which a creator operates plays an influential role in creative production. Building on this knowledge, the empirical component of this study reveals that Google search is a key means of accessing the cultural representations of the domain – either on a task specific or on-going basis – that are crafted into novel advertisements. In terms of information discovery, Google provides convenient access to research materials that allow creatives to be aware of their environment and link new ideas to existing tasks. When Google search is used as an external memory it acts as a transactive memory partner that allows creatives to focus their efforts on the creation of novel associations rather than the act of recall. However, Google’s inability to distinguish between information discovery and information recovery results in a flawed approach to pre-emption that, according to Hillis, Petit and Jarrett (2013), favours the act of recovery and thus greater exposure to the known. The search engine’s application of collective intelligence to pre-empt and personalise search results subtly prioritises the collective over the particular. An increased likelihood of unintentional plagiarism emerges. Participants commonly noted that creative advertising was more difficult to achieve than conventional approaches; the largely unrecognised conditioning of their research and recall actions is likely to be making their pursuit of novelty even more arduous. Questions were also raised about the relationship of adaptive search and postmodern advertising. By providing immediate access to an abundant yet still personalised selection of media texts it is possible that Google search encourages

parody or pastiche in advertising production. If Google is used as a 'safety net' by art directors and copywriters when novel ideas simply don't come, does this in turn encourage the recycling of what has come before? If so, a client's best interests may not be served by an advertisement that is based on ideas from this relatively shallow pool of source material.

7.4 The naturalisation of Google's intelligent agency

This section examines the naturalisation of Google use in the creative processes of art directors and copywriters. Unlike other technologies that draw attention to themselves when new, Google's intelligent agent capabilities have emerged incrementally and largely without announcement. Due to this invisibility, the search engine's intelligent agent capabilities have been naturalised into everyday life with little or no questioning of their affordances or influences. Consistent with this argument, this study found that participants did not generally recognise that the manner in which Google learns from the user's online behaviours and subsequently acts in response to this information.

According to Bell, technologies pass through a number of stages before being naturalised into everyday life. When technologies are new they draw attention to themselves and are often perceived as objects of prestige or convenience. Repeated use in everyday contexts diminishes this novelty until the object becomes largely invisible to the user and is no longer perceived to be 'technological at all' (2006, pp. 6–7). In this sense, the concept of technological naturalisation has much in common with ideology, which manifests as a set of beliefs that is established through practice rather than deliberation. When technology becomes a part of everyday life, to the point at which we can no longer imagine what we did without it, the object becomes grounded in common sense or common utility. Bell's description of the naturalisation of technology is well suited to many ICT objects however this paradigm falls short with regard to intelligent agency that sits behind an unchanging interface, such as Google search.

It is easy to see that Siri, Apple's mobile device personal assistant software, draws attention to itself when introduced to users. Technologies like this hold fascination for the user due to their novelty, and their functions must be learned through practice; these reactions then diminish through everyday

use to the point of naturalisation. However, the incremental development of intelligent agent capabilities that sit within an existing program, such as the gradual introduction of personalisation within Google search, bypasses the novel stage and moves straight to naturalisation. Halavais (2009) writes that search engines are simultaneously the most visible and least obvious aspect of the digital age. Google's clean, white, largely unchanging home page is instantly recognisable to web users yet few take the time to ponder the effects of its algorithms, that are constantly changing behind the scenes. Bell writes that the concepts of novelty and technology have always been interlinked (2006). The emergence of intelligent applications within existing programs challenges this perspective. They are never 'new' to the user, and thereby present a form of naturalisation that does not require the user's initial consideration of their use or influence.

Google search is a complex object that works across various platforms, such as other Google services, to build a profile of logged-in users, and it is influenced by numerous, continually changing algorithms. However it exists as a 'black box' to most users and its underlying complexity is obscured.

According to Winner:

The term black box in both technical and social science parlance is a device or system that, for convenience, is described solely in terms of its inputs and outputs. One need not understand anything about what goes on inside such black boxes. One simply brackets them as instruments that perform certain valuable functions. (1993, p. 365)

On face value this aptly describes Google search. For the majority of people outside the field of information technology, search engines, and indeed most ICT objects, exist as black boxes. To make the search engine work as desired the user only needs to input search terms through the search box to receive an output of search results. However, there are a number of inputs that are completed on behalf of the user and without their knowledge or the requirement of direct manipulation. For instance, Google search pre-emptively inputs contextual elements on behalf of the user, such as location and preferences, based on the collection and analysis of data about the searcher.

This automation of contextual inputs remains hidden due to the means by which the data is collected. Unlike other programs, such as Adobe InDesign, in which the user manually sets his or her preferences, much of the contextual data that guides Google search is established through the silent

harvesting of information about the user. Broadly speaking, this allows Google to provide two modes of general search engine personalisation. The first is Google Instant, which predicts the user's search query by pre-empting their search intention, a function that is embedded into the address bar of most Internet browsers and the search field on Google's home page. The second mode of personalisation affects the filtering of search results.⁴⁴ Users are able to turn off their history or log out of Google programs to avoid pre-emption and personalisation based on their Google profile, but if they are not aware of the relationship between their search history and the filtering of their results this is unlikely to happen. The lack of a requirement to set preferences for Google's pre-emptive and personalisation features means that the affordances of its intelligent agent capabilities are identifiable only through a consideration of the nature of its outputs. The majority of participants in this study did not describe personalisation as a means by which Google search filters its results, nor did they reflect on outputs. For them, Google's intelligent agency can be described as a black box; there is limited understanding of both search engine inputs, the information collected about the searcher, and outputs, how search results are determined.

The largely invisible nature of Google's pre-emption and personalisation capabilities has seen the search engine emerge as a widely used and rarely questioned application of intelligent agency in advertising production. As noted previously, black boxes are only questioned when they do not work as anticipated, something that has been a problem for personal digital assistants with separate interfaces, such as Siri. Microsoft's Clippy assistant drew attention to itself not just because of its cartoon interface but also due to its visibility at times when it was not needed. The program became more of an annoying distraction because it was not a butler in the true sense (making itself visible only when needed). In addition, the highly visible nature of the program provided users with a hook on which to hang their frustrations. In contrast, the flaws in Google search's intelligent agent capabilities have been much less likely to be questioned because they have emerged from within an existing

⁴⁴ As mentioned in Chapter Two there are two levels of Google search users, those whose behaviours are monitored through cookie programs that collect data about online behaviours and those who have logged into a Google product. The latter group provides Google with a richer picture of their behaviours due to the provision of data that can be directly linked to the user rather than an IP (Internet protocol) address.

interface. The quietly incremental development of Google search's intelligent agency further supports naturalisation. As a freely available, online software object, Google is in a position to avoid formal version releases. Instead its pre-emptive and personalisation capabilities can be updated often and without announcement. Analysis of participant discussion suggests that even when dissatisfied with the quality of search results they will continue to use Google search at some point in the creative process in the belief that they are in control of its functioning.

Participants commonly stated that Google did influence their creative process. For instance, it was described as 'just a tool' by mid-weight copywriter Xavier, who suggested the search engine was 'like a hammer to a carpenter'; in this instance Google is not perceived to act independently on behalf of its users but instead is viewed as predominantly dependent on direct user manipulation. Other participants described Google as a means of merely connecting them to online content and did not consider search results to be a form of online content; this is a perception of search as a 'public utility', a service that delivers outputs without perceived adulteration and that is only considered in terms of its end result (Hillis, Petit & Jarrett 2013, p. 5). Both the 'tool' and 'public utility' conceptualisations fail to recognise the fact that an adaptive search engine filters online content. The perception that Google is under the control of the user rather than an autonomous actor with its own goals conforms to a particular professional identity: the belief that the creative develops novel associations through complex cognitive actions that cannot be automated by software applications. That is not to say that Google has complete autonomy; instead the relationship between searcher and search engine in the creative process has emerged as complex form of human-technology collaboration.

Analysis of participant discussion revealed that while many were concerned about the influence of Google search, it was nevertheless employed in the creative process. The use of Google to 'find solutions' to a creative 'problem' was commonly criticised by those in the big idea practitioner group, yet its use was deemed acceptable when deployed knowingly, that is, for specific tasks such as memory recall. This is indicative of a particular form of faith in Google search. Scholars have identified a consecration of Google (Pariser 2011; Vaidhyathan 2011; Hillis, Petit & Jarrett 2013); for participants in this study, faith in Google emerges as a faith in its utility for specific tasks or as a safety

net when their own knowledge and experience are exhausted. Other participants, such as those in the fashion category who stated that Google was used extensively as a research tool, were concerned about being trapped in a 'filter bubble' (Senior art director Geoffrey) or being exposed to repetitive visual references (Senior art director Vicky). Their faith can be interpreted as sustained belief in the search engine's continuous innovation, which generally occurs behind the scenes but of which the user is tacitly aware. As Simpson points out, the modernist ideal of progress may have lost its purchase in a general sense, however the 'metanarrative of technological progress' has continued to bloom (1995, p. 154).

A lack of perceived alternatives is another possible explanation for the continued use of Google despite concerns over the limited qualitative diversity of its outputs. For participants, Google was analogous with the concept of search. Every participant identified Google as the main search engine used in the creative process. For example, senior copywriter Emily reported: 'You almost don't want to risk it with anything else.' This statement suggests that no other search engine is considered to be of the same standard, and that failure to use Google may result in self-imposed isolation from valuable web content. As Vaidhyathan writes, 'Google is better because it's bigger, and it's bigger because it's better ... Opting out or switching away from Google services degrades one's ability to use the Web' (2011, p. 20). This perceived lack of alternatives and the fear of a reduction in access to content explain why Google continues to be used and is being even further embedded in creative practice despite concerns about its use.

Perceptions of a generational difference with regard to the influence of searching for research materials in response to a specific project were noted; the more experienced participants described changes in their research actions since the growth of digital networks. For instance, senior participants including Oliver and Jeremy said individually that they were conscious of the influence of online media because they had spent part of their lives without the Internet. A number of senior participants also discussed the habit of keeping their own record of sources of inspiration in notebooks that could be used in future creative projects. In contrast, younger participants such as Hannah reported that spending considerable amounts of time consuming online media was something

'you have to do to an extent'. This second statement reveals that for younger practitioners the use of online media in everyday actions is part of a 'commonsense' approach that is perpetuated by dominant institutions (Barthes 2012, p. 11). In this instance, the dominant institution is not the employer but the ICT developer. It also suggests a movement away from the more senior participants' habit of inscribing and storing sources of inspiration in notebooks, and towards younger participants' use of Google search to instantly access cultural representations.

In summary, the processes of naturalisation offers a means of understanding how Google search, a widely used form of intelligent agency, has been incorporated into practice by a group of creative advertising practitioners. Google search, a black box that obscures its inner workings, is representative of emerging forms of embedded intelligent agency that disguise their own functioning. Interpretation of participant discussion of Google search use indicates little is known about the functioning of the search engine, a finding that reveals naturalisation of use and in effect limits questioning of the influence of this software on the creative process. Concerns were raised about the risk of overly derivative outcomes as a result of using Google search, however the search engine was not avoided. This ambivalence suggests faith in technological progress, and perhaps an implied understanding of the cost of avoiding an application that has emerged as the primary gateway to the research materials collected by creatives.

7.5 The future of intelligent agents in the creative process

The analysis presented here on the use and effects of Google search allows projections to be made about the influence of other existing and emerging intelligent agents. This is achieved through a consideration of the two intelligent agent categories introduced in Chapter Two. The first category consists of intelligent agents with separate interfaces, while the second consists of intelligent agents that are embedded into existing software systems. Google search is an example of the second type. This chapter has argued that the intelligent agent capabilities of Google search have been naturalised in the creative process largely due to the incremental and invisible changes in the functioning of Google search under its largely unchanging interface. This section discusses why embedded intelligent

agents rather digital assistants are more likely to be embraced by participants as part of their everyday creative process tasks in the near future.

Analysis of participants' discussion of their creative process suggests there is limited practitioner awareness of the term intelligent agent, an expected finding because the term has fallen out of common use. Those who were aware or somewhat aware of the concept of an intelligent agent linked the term to advertiser-to-consumer communication, for example, paid advertising on search engines, and retail websites such as Amazon. Intelligent agents with standalone interfaces, such as Apple's Siri personal assistant for mobile devices, were mentioned by a small number of participants, however they were not described as being part of the creative process. A reluctance to involve this latter form of intelligent agent in the creative process was articulated by senior copywriter Emily: 'Unless it's as quick as you are I think most creative people would find it very frustrating, like having to explain (tasks) to a slow assistant.' However this perspective carries the implication that intelligent agents in the form of standalone digital assistants might be used more at some point in the future as their pre-emptive capacity builds.

While not mentioned by any participants in this study, Google Now is an example of a digital assistant or butler for mobile devices that promises to deliver 'just the right information at just the right time' and 'answer the user's questions before they ask them' (Google 2013). To do this, Google Now observes its user's mobile device habits and in response pre-emptively provides information such as traffic reports, weather forecasts, news media updates on stories of interest and calendar reminders. Its predictions depend on the software's ability to monitor and learn from the user's application of Google's products. However Google Now's capabilities no longer end there. As of May 2015, Google Now also collects data from third party apps to increase the pool of information it can analyse as part of its Google Now On Tap initiative (Berlind 2015). When Emily talks about the limitations of using a 'slow assistant' it is likely that she is referring to the pre-emptive capacity of the software rather than its processing speed. With access to an ever-increasing amount of data Google Now will be in a position to more accurately predict the user's information needs. However, highly visible intelligent agents such as Google Now face a more difficult path to naturalisation in the creative

process than those embedded into existing software. Google Now seeks to provide information on both the personal and the professional lives of the user in the one interface. It may also fall into the 'Clippy trap' of popping up when not needed, and because it has a separate interface, when something goes wrong there is a known entity to blame and potentially not use again. This contrasts with Google search, which is not generally recognised as possessing intelligent agent capabilities and is therefore better placed to avoid criticism of its adaptive capacities.

The success of embedded forms of intelligent agency supports Nwana's contention that the development of intelligent agents is more likely to be evolutionary than revolutionary as a result of their placement in everyday objects (1996, p. 140). A fully formed intelligent agent capable of immediately understanding and responding to its user's environment across a range of contexts – a HAL from *2001: A Space Odyssey* (Kubrick dir. 1968) or a Samantha as depicted in *Her* (Jonze dir. 2013) – has yet to appear. Instead, the path towards acceptance of intelligent agents has occurred below the surface. In the same way that Google's offering has become the accepted, best-practice model of search (Hillis, Petit & Jarrett 2013), it is possible that it will also become the template for intelligent agents that are embedded in other existing technologies. With regard to the creative process, there is no reason to assume that Google's dominance in the field of search will be challenged in the near future. However other programs currently in use, such as the EverNote cloud-based note-taking application, may introduce pre-emptive functions incrementally. Possible future uses include pre-empting what type of content the user would like to collect, or the autonomous management of files on the basis of knowledge of the user's previous information categorisation behaviours. This instance would be an application of a form of intelligent agency to an existing creative-process action, the documentation of sources of inspiration.

Other specialist intelligent agents with their own interfaces may emerge for specific purposes other than search. For example, several participants said that they used a 'Google check' was used to determine if a concept for a creative advertisement had previously been produced. In this instance, Google becomes more than just a conduit to the domain; it also becomes a member of the field, a gatekeeper of what can be accepted as novel and an appropriate response to a given task. It is possible

that a standalone Google product may emerge that would allow practitioners to go beyond checking the originality of the message to also predicting the audience reaction – through the application of the collective intelligence – to an as yet unproduced advertisement concept. In effect, Google check would become ‘Google critic’.⁴⁵ However, though it would fulfil a discrete task, the Google critic action might also tend to reinforce the status quo by reinforcing the algorithmically derived echo chamber, in which the user is removed from his or her own experience and limited to what has come before.

The study of Google search in the creative process has much to tell us about the still emergent field of intelligent agents. The successful interpolation of intelligent agency into an existing platform offers a template for future manifestations of adaptive software. Many previous intelligent agents with standalone interfaces have not been widely adopted due to the user’s awareness of their existence; when they do not work as intended the agent is avoided. Google search has managed to avoid this fate and emerge as a naturalised object, one that aims to satisfy the needs of every Internet user but consequently presents challenges for art directors or copywriters, who could benefit from diverging from algorithmically determined information pathways.

7.6 Conclusion

This chapter has applied theoretical insights to discursive accounts of creatives’ practice to explore the implications of intelligent agent use. It has revealed that the values promoted by the developers of Google search have the capacity to fold unobtrusively into the work practices of these specialist knowledge workers. This presents unintended consequences for participants as the values of efficiency, speed and ICT-related flexibility do not necessarily align with aspects of creative practice. The use of adaptive technologies with these values encourages a bottom-up form of informational Taylorism in the production of creative advertising. Creative practice in an advertising context requires rules and constraints but also needs to diverge from the familiar and conventional. Software with intelligent agent capabilities, such as Google search, does not seek to diverge from the expected.

⁴⁵ Google search does not yet have this capability, however US film studios are embracing algorithms that predict the success of films based the evaluation of yet-to-be-produced screenplays (Barnes 2013).

Instead it pre-empts the user's intentions by presenting familiar and personalised search results based on the collective intelligence of the network. This results in a flattening of experience if art directors and copywriters use the search engine as their window onto the world or as a transactive memory partner to recall concepts that are drawn into the creative process. Importantly, these unintended consequences are occurring in a context in which Google search's intelligent agent capabilities have been introduced into practice without drawing attention to their affordances.

If naturalisation can be considered a benchmark of commercial success for ICT, Google appears to be excelling in the development of a particular type of intelligent agency, one that has been incrementally embedded into an existing object as opposed to being established as a standalone software application with its own interface. This success is consistent with the participants' limited use of intelligent agents that can be characterised as digital assistants or digital butlers. While these kinds of intelligent agents with separate user interfaces, such as Siri or Google Now, are currently in use, it is the embedded forms of intelligent agency that are more likely to have a pronounced influence on the creative process in the near future as they grow in sophistication. This influence is a result of an evolutionary rather than revolutionary movement of intelligent agency into everyday life, one predicted by Nwana (1996). Hype and subsequent disappointment have been associated with the highly visible intelligent agents that have standalone and often-metaphorical interfaces. In contrast, the intelligent agency capabilities of Google search have been quietly introduced and widely accepted. Just as Google's model of search has emerged as a template for other search engines, its approach to pre-emption and personalisation is likely to be a template for future intelligent agents used in the creative process.

Chapter Eight

CONCLUSION

Two or three advertising creatives I spoke to informally about this thesis in its very early form scoffed at me when I outlined my research topic. Their initial response was to assume I was investigating whether intelligent forms of computing could replace art directors and copywriters. This, I explained, was not my intention. I then discussed my interest in how creatives and new media technologies work together to develop new ideas. An understanding of this line of inquiry received an equally sceptical response. But what has become certain from the in-depth questioning of eighteen copywriters and art directors and analysis of this data is that emerging digital media technologies do play a role in shaping the relationship between the field, the domain and the creators of creative advertising. The influence of mediated sources of inspiration in advertising creativity has been touched on before (Vanden Bergh & Stuhlfaut 2006), however this thesis confirms that the relationship not only exists but is intensifying. New media technologies provide access to an abundant collection of informational resources in ways that previous media forms simply could not achieve. Towards the end of the 20th century, Arthur Kover (1995) identified that advertising creatives often developed an ‘implied reader’ by imagining they were writing an advertisement for a friend or family member who reflected target audience criteria. As a result of this thesis we know that art directors and copywriters go beyond imagining members of their inner circle as audience members. In the network society era, they search online media to find ‘insights’ about audience members that can then be crafted into novel and task-appropriate messages. Prior to the Internet, award books, weekly industry magazines and mediated cultural representations in analogue form – a relative scarcity of information – were relied upon as sources of inspiration. In contemporary practice, relevant information is presented in an immediate and abundant stream of text, imagery and audio-visual material. Assistance is required to manage exposure to this plethora of information about the field and domain. This assistance is increasingly

emerging in the shape of intelligent agents, a form of computing that emerged from artificial intelligence and one that today focuses on human–computer interactions which manifest in both visible and obscured modalities.

Google search is an example of intelligent agency – an adaptive search engine – that observes its users and presents a ‘generically individual’ index of pre-empted results. Google acts on behalf of users by algorithmically parsing the collective intelligence provided by the Internet and using this knowledge to anticipate content options that its users are likely to believe are ‘relevant’ to their search. The search engine provides a manageable means of accessing Internet content that has overshadowed all other web-related tasks to the point that, for some participants in this study, Google is synonymous with the Internet. In the creative practice of advertising art directors and copywriters it offers considerable utility – it has emerged as the Swiss army knife of the online domain, a program that is perceived to provide objective information on all matters, personal and professional. To paraphrase Jensen (2012), Google search has become a guide for everyday living. Yet with regard to the work process of art directors and copywriters, this thesis has revealed a series of unintended consequences. Principle amongst these is the simultaneous opening and closing of access to the domain, the repository of cultural representations. To reach this finding my research needed to identify the everyday tasks of advertising creatives. This was not the original intention of the project, however as research progressed it was clear that how creatives prepare their minds for ideation was important, and this line of inquiry ultimately opened up new areas of knowledge.

This study has provided an important exploratory snapshot of a group of practitioners’ understanding of adaptive software use in the creative process. The majority were concerned or ambivalent about the intrusion of emergent technologies into the creative process but were not sure why they should be apprehensive. Possibly this reflects a romantic self-perception in which art directors and copywriters are characterised as lone geniuses who develop new ideas predominantly as a result of intuitive and internalised processes. Or perhaps practitioners carry a tacit concern that they are deploying technology that they do not fully understand either in terms of its affordances or its influences. A layer of difficulty emerged in the thesis when it became apparent that participants were

largely unaware of the adaptive software applications that were being applied on a daily basis. This is understandable as intelligent agent research is predominantly the domain of information and computer researchers, who are less interested in social consequences than they are in functional matters. While there are a small number of exceptions (Serenko, Ruhi & Cocosila 2007; Wise 1998), a lack of social sciences research indicates that intelligent agents are assumed not to have a social life, and to date have not been considered to have an influence on creativity in professional communication contexts. These barriers were overcome by exploring practitioner perceptions of their behaviours and their use of new media, through the lens of network society theory and literature on the socio-cultural influences of search engines. The findings are congruent with critiques of Google search use in a universal sense, however my research opens up new knowledge on creative practice in the digital era. This approach, which is a new methodology for research into advertising creativity, could be applied in future studies of the relationship between creative practice and adaptive new media technologies.

A challenge in studying these technologies is their continuous innovation. A small number of innovations occurred at the end of the thesis writing process with Google's introduction of text-based information on how many times the user had previously visited a page, and notifications that the search engine knows your location. Both reveal a desire on behalf of Google to be clearer about how the search engine filters its results. It is, however, unlikely that these changes would have alerted practitioners to the depth of Google's personalisation abilities, which will further improve as the search engine finds more ways to zone in on the user and becomes less generically individual. This point aside, there is a general lack of awareness of how Google filters its search results, and this means practitioners are predominantly exposed to the most popular and familiar online content and thus their access to diverse or unusual sources of inspiration is limited. The application of a technological subconscious – the formation of associations between ideas by the search engine based on an anticipation of the searcher's intention – can limit imaginative possibilities and provide information without a 'backstory'. Recent developments and predictions aside, this study has found participants possessed a limited awareness of how Google filters its search results. These art directors and copywriters are being exposed predominantly to the most popular and familiar online content, and

thus experiencing diminished access to diverse or unusual sources of inspiration, either without knowing why this occurs or that is happening in the first instance. This matters because adaptive search represents a new form of media content production, one in which relationships between ideas are algorithmically developed on behalf of the user. The application of a technological subconscious – the formation of associations between ideas by the search engine based on an anticipation of the searcher’s intention – can limit imaginative possibilities and provide information without a ‘backstory’.

This thesis also discussed the implications of Google search’s moderation of the cognitive acts of forgetting and remembering. By encouraging repeated exposure to the online content Google thinks a particular user wants, it makes the act of forgetting more difficult. Practitioners are required to know what advertisements have come before to understand what the field considers to be novel and appropriate but they also need to forget them to develop novel outcomes. Google search amplifies the ‘echo chamber’ of the advertising industry commonly described by participants as an inhibiting condition. The relationship between creatives and adaptive search also involves the delegation of recall. Analysis of participant responses highlighted Google search’s perceived utility as an immediate and omnipresent external memory. While the digital memories provided by Google search may be shaped into a multitude of new associations, the source material lacks the particularity that emerges from the user’s own act of recall. If used sporadically, the material from Google search may have little influence, however when applied habitually it will emerge as an influential actor in the creative process, one that is capable of standardising creative process outcomes. The use of Google as a transactive or external memory can also reduce the creative’s ability to recall the source of a new idea; it encourages unconscious plagiarism of ideas, and facilitates the production of messages that lack the novelty required to bring about audience engagement and participation. It is worth reiterating that the research model used by this thesis has the limitations that are inherent in research into semi-conscious patterns and habits of technological use because it relies on the interpretation of participants’ recollections. As mentioned in Chapter Four, these recollections are limited due to the often tacit nature of technology use and may be shaped by the self-legitimation of an idealised approach to creative practice. However, it is clear that software programs like Google search are

increasingly building their abilities to mimic aspects of human cognition; thus the act of delegating tasks to this type of software presents an early form of cognitive interdependence between humans and their ICTs.

This thesis does not argue that the creatives involved in the study solely rely on Google as a means of developing ideas or learning about the world around them; instead it reveals the tendency of intelligent technology to reduce the qualitative diversity of information drawn into the creative process. The concerns raised here are not limited to Google. For instance, YouTube has similar intelligent agent capabilities to those of Google search (both are products owned by Google Incorporated). This raises the question of whether practitioners have similar concerns about this technology. Does the adaptive filtering of video material have a more powerful influence on practitioners than the pre-emptive and personalised filtering of general search engines? Future research on the influence of YouTube and other peer-to-peer video websites that employ adaptive search technology is required to consider this possible tendency. In addition, this study notes a difference in perception of new media use between younger and older creatives, which could be considered in future studies. These methodological considerations aside, the successful application of intelligent agency is indicative of a broader movement towards the delegation of human cognitive tasks to media technologies that have the capacity to learn from the user and respond accordingly. When new uses of Google emerge,⁴⁶ and additional adaptive new-media platforms are introduced, a critical mass of intelligent agents will emerge. It is at this juncture that the tendencies identified in this thesis will be amplified. This is not to say that they will 'take over' human tasks such as creative practice, but instead they will emerge as silent collaborators as a result of their ability to learn by observing their environment and to act independently on that knowledge, affordances that previous media have not possessed.

A growing amount of research is taking place on the socio-cultural influence of Google search on knowledge (Hassan 2008; Vaidhyathan 2011; Hillis, Petit & Jarrett 2013). My thesis extends this

⁴⁶ An example presented in this thesis (and one worthy of future study) is the practitioner habit of doing a 'Google check' to identify whether a 'novel' idea has been previously used by other creatives in an existing advertisement.

critique by considering its implications for creative practice. It has argued that rather than being an objective conduit to information that is ideologically neutral, Google search embodies a series of values that are capable of folding into the practice of knowledge workers. The values of efficiency, speed and flexibility constitute an informational Taylorism that shapes the environment in which creative advertising is produced. However, the technological rationality espoused by Google Incorporated is at odds with the creative act. Advertising is, of course, the mouthpiece of capitalism in most communicative contexts, yet the *productivity* required to achieve creative advertising is not the same productivity required to achieve novel ideas that present the familiar in an unfamiliar way such that they engage audiences who are eager and able to avoid advertising messages. The complexities presented by the use of intelligent agents is emerging at a time when advertising is being forced to transform by moving away from message repetition and 'push' media approaches as the primary means of changing the behaviour of audiences. Advertising is being required to engage audiences in novel ways to encourage not just attention but also participation, often in the form of co-created brand narratives. Quite simply, creativity has never been more important to the industry.

There can be little doubt that the study of intelligent agents – a form of technology that is used but largely unrecognised as a result of predominantly being embedded in other technologies – is an under-explored area outside the domain of information and computing technology. The extensive amount of research that is undertaken in this field focuses on the uses and design of intelligent agents. While there are some exceptions, neither ICT nor social science researchers have sufficiently considered the social life of this form of technology. This study of the influence of these incipient technologies on a specialised area of practice – on the working lives of the actual users – contributes to our understanding of a new media form that is, in essence, a type of artificial intelligence. This perspective enables one very big question to emerge: Given that these technologies present both gains and losses, will a tipping point emerge when the losses become so obvious that users will start questioning the introduction of intelligent agency into their everyday lives? The answer – based on the tendencies presented in this thesis – is no. Intelligent agents are in a constant state of change and innovation that occurs below the user's awareness. For instance, the current inability of Google search

to understand if the searcher is seeking the popular or the unknown, the conventional or unconventional, will potentially be changed to the extent that it will know exactly what an individual user wishes to achieve. When this 'strong' form of intelligent agency emerges, adaptive ICTs will again improve to the point that there may be little cognitive distinction between humans and their software. They will, in effect, reflect their user's creativity. This is not indicative of replacement of humans by computers, but a nascent form of human-computer collaboration and thus its implications remain unknown. However, in these early days of intelligent agent use this 'seamless' collaboration does not yet exist. At this point in the journey of intelligent agents into everyday life they both help and hinder creative practice.

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Appendix

INTERVIEW QUESTIONS

1/10/2012

1.0 BACKGROUND INFORMATION

1.1 How long have you been working as an advertising creative?

1.2 Which best describes your employment situation?

- | | | |
|--|--------------------------|--------------------------------|
| Employed by an advertising agency | <input type="checkbox"/> | Estimated number of employees: |
| Employed by an advertising and design agency | <input type="checkbox"/> | Estimated number of employees: |
| Employed by a design agency | <input type="checkbox"/> | Estimated number of employees: |
| Self employed / freelance | <input type="checkbox"/> | |
| In-house advertising department | <input type="checkbox"/> | |
| Other: | | |

1.3 Which of the following best describes your job role:

- | | |
|---------------------------|--------------------------|
| Senior art director | <input type="checkbox"/> |
| Senior copywriter | <input type="checkbox"/> |
| Middleweight art director | <input type="checkbox"/> |
| Middleweight copywriter | <input type="checkbox"/> |
| Junior art director | <input type="checkbox"/> |
| Junior copywriter | <input type="checkbox"/> |
| Other: | |

1.4 Do you regularly work in a team with another creative? If so, what is their job role?

1.5 Which age category do you fit into?

- | | |
|-----------------|--------------------------|
| Younger than 18 | <input type="checkbox"/> |
| 18-25 | <input type="checkbox"/> |
| 25-35 | <input type="checkbox"/> |
| 35-45 | <input type="checkbox"/> |
| 45-55 | <input type="checkbox"/> |
| 55+ | <input type="checkbox"/> |

1.6 Gender

Male ☐

Female ☐

1.7 In which city do you predominantly work?

1.8 What is your highest level of education?

HSC or equivalent ☐ Discipline:

TAFE qualification ☐ Discipline:

Bachelors degree ☐ Discipline:

Post graduate-qualification ☐ Discipline:

Vocational training ☐ Discipline:

2.0 THE CREATIVE PROCESS

2.1 In your own words, how would you describe the term 'creativity'?

2.2 How does creative advertising differ from other forms of advertising?

2.3 How important is it to you to produce creative advertising?

2.4 Describe your creative process or routine.

2.4.1 How structured or habitual in this process?

2.5 Can you give me an example of your creative process for a recent advertisement?

2.6 How much of your client-related creative thinking takes place outside of your workplace?

2.7 Do online technologies play a part in your creative process?

2.8 Do online mobile technologies, such as smartphones and tablet computers, play a role in your creative process?

3.0 ORGANISATIONAL FACTORS

3.1 What factors enable you to successfully develop ideas for creative advertising concepts?

3.1.1 What role does time play?

3.1.2 Do you feel client expectations are changing with regard to the delivery of creative ideas?

3.2 What obstacles stand in the way of conceiving ideas for creative advertising concepts?

3.2.1 Are these recent or long standing obstacles?

3.3 How much control do you have over your own work processes?

3.4 How would you describe the organisational structure of your agency?

4.0 SEARCH ENGINE USE

- 4.1 What sources of inspiration do you seek out when working on a creative brief?
- 4.2 Can you describe a situation in which you used a search engine when looking for sources of inspiration?
- 4.3 Does your use of (insert most used search engine name) to find sources of inspiration follow a standard pattern or routine?
- 4.4 Are search engines used for any other creative process activities other than searching for sources of inspiration?
- 4.5 Does the use of (insert most used search engine name) limit your creativity in any way?
- 4.6 How often do you use Google in your personal life?
- 4.7 Does your recreational use of (insert most used search engine name) shape your work related creativity?
- 4.8 Could you describe to me how (insert most used search engine name) filters its search results?
- 4.9 Do you believe your use of search engine is similar to other creative's working in the office?

5.0 INTELLIGENT AGENTS

- 5.1 In addition to search engines, what software tools do you regularly use as part of the creative process?
- 5.2 What do you understand by the term 'intelligent agent' or 'software agent'?
- 5.3 What role (if any) do 'intelligent agents' or 'software agents' play in your creative process?