

Weller, T.D. (2007). Information in nineteenth century England : exploring contemporary socio-cultural perceptions and understandings. (Unpublished Doctoral thesis, City University London)



**CITY UNIVERSITY
LONDON**

[City Research Online](#)

Original citation: Weller, T.D. (2007). Information in nineteenth century England : exploring contemporary socio-cultural perceptions and understandings. (Unpublished Doctoral thesis, City University London)

Permanent City Research Online URL: <http://openaccess.city.ac.uk/8558/>

Copyright & reuse

City University London has developed City Research Online so that its users may access the research outputs of City University London's staff. Copyright © and Moral Rights for this paper are retained by the individual author(s) and/ or other copyright holders. All material in City Research Online is checked for eligibility for copyright before being made available in the live archive. URLs from City Research Online may be freely distributed and linked to from other web pages.

Versions of research

The version in City Research Online may differ from the final published version. Users are advised to check the Permanent City Research Online URL above for the status of the paper.

Enquiries

If you have any enquiries about any aspect of City Research Online, or if you wish to make contact with the author(s) of this paper, please email the team at publications@city.ac.uk.

**Information in Nineteenth Century England:
Exploring Contemporary Socio-Cultural
Perceptions and Understandings**

Toni Danielle Weller

Department of Information Science
City University, London

**A thesis submitted in partial fulfilment of the requirement
for the degree Doctor of Philosophy**

August 2007

Declaration

I, Toni Danielle Weller, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Toni Danielle Weller, August 2007

The copyright of this thesis rests with the author and no quotation from it or information derived from it may be published without the prior consent of the author.

© Toni Danielle Weller 2007

Contents

Page No.

List of Illustrations.....	6
Acknowledgements.....	8
Abstract.....	9
Introduction.....	10
1 DEFINITIONS: INFORMATION AND INFORMATION HISTORY	13
1.1 What is Information?	14
1.1.1 Facts, Knowledge, Information	15
1.1.2 Information as a Thing, Process, or Social Construct	16
1.1.3 Information Theory	17
1.1.4 Information as All Embracing	18
1.2 Defining Information Historically	19
1.3 My World-View	23
1.4 Information History	27
1.5 Contribution to Knowledge	28
2 LITERATURE REVIEW AND METHODOLOGY	29
2.1 Introduction	29
2.2 The Theoretical – The Existing Literature	29
2.2.1 History or Information Science?	29
2.2.2 What Has Gone Before	30
2.2.3 The Significance of Information History	35
2.2.4 Where Information History Fits in Relation to the Information Science Discipline	38
2.3 The Practical – The Research Methodology and Design	39
2.3.1 Chronological Scope	39
2.3.2 Geographical Scope	40
2.3.3 Research Questions	41
2.3.4 Chapter Three, Individual Perceptions	43
2.3.5 Chapter Four, Etiquette and Behaviour	44
2.3.6 Chapter Five, Periodical Knowledge	45
2.3.7 Chapter Six, Panic and Awareness	45
2.3.8 Chapter Seven, Bringing It All Together	46
2.3.9 Chapter Eight, Assessment, Evaluation, and Future	47
3 INDIVIDUAL PERCEPTIONS: NINETEENTH CENTURY VIEWS OF INFORMATION	48
3.1 Introduction	48
3.2 Language in the Nineteenth Century	52
3.3 Arthur Wellesley, Duke of Wellington (1769-1852)	56

3.4	Miss Florence Nightingale (1820-1910)	64
3.5	Mr. Julius Reuter (1816-1899)	71
3.6	Mrs. Eleanor Sidgwick (1846-1936)	79
3.7	Contribution to Knowledge	88
4	PERCEPTIONS OF INFORMATION: INFORMATION ETIQUETTE AND BEHAVIOUR	90
4.1	Introduction	90
4.2	A Social Crisis of Control	93
4.2.1	Pre-1800	93
4.2.2	Early Industrialisation 1800-1837	93
4.2.3	The Victorians 1837-1900	95
4.3	The Beginnings of Regulated Society	97
4.3.1	Courtesy Pre-1800	97
4.3.2	Silver Fork Novels 1800-1834	98
4.3.3	Etiquette 1834-1900	100
4.4	Manifestation of Control: The Acceptance of Standardised Behaviour	106
4.5	Regulation of Appearances	113
4.6	The Crisis Controlled: 1880-1900	119
4.7	Contribution to Knowledge	124
5	PERCEPTIONS OF INFORMATION: PERIODICAL KNOWLEDGE	127
5.1	Introduction	127
5.2	<i>The Penny Magazine and the Illustrated London News</i>	131
5.3	Commercial Information: A Cultural Commodity	132
5.4	Visual Information: or, Informative Art?	138
5.5	Authentic Knowledge	150
5.6	Preservation of Knowledge	156
5.7	Contribution to Knowledge	161
6	PERCEPTIONS OF INFORMATION: PANIC AND AWARENESS	164
6.1	Introduction	164
6.2	Situating the Victorian Channel Tunnel Debate	168
6.3	Key Contemporary Arguments	169
6.4	Official vs. Unofficial Perspectives	172
6.5	Language: Rational and Scientific vs. Emotive and Sensational	177
6.6	The 'People'	182
6.7	Overseas Perspectives	185
6.8	Open Access to Information	189
6.9	Propaganda and Public Relations	192
6.10	Contribution to Knowledge	200

7	PERCEPTIONS OF INFORMATION: BRINGING IT ALL TOGETHER	203
	7.1 Introduction	203
	7.2 Conclusion One: Information Becomes More of an Abstract Thing in its Own Right	205
	7.3 Conclusion Two: Public and Private Information	209
	7.4 Conclusion Three: Peoples' Right to Information and the Valuation of Content	214
	7.5 Conclusion Four: Visual Information	220
	7.6 Dissertation Contributions to Knowledge In Summary	225
8	ASSESSMENT, EVALUATION, AND FUTURE	228
	8.1 Assessing the Research Questions	228
	8.2 Would I have done anything differently?	231
	8.3 The Contribution to Knowledge – The Significance of My Research to Contemporary Information Scholarship	232
	8.4 Taking the Research Forward	233
9	BIBLIOGRAPHY AND REFERENCES	237
	9.1 Libraries and Archives Consulted	237
	9.1.1 Primary (Pre 1900)	238
	9.1.1.1 Unpublished Works	238
	9.1.1.2 Published Works	239
	9.1.1.3 Official Reports	251
	9.1.1.4 Journals and Newspapers	252
	9.1.2 Secondary (Post 1900)	252
	9.1.2.1 Unpublished PhD Theses	252
	9.1.2.2 Published Works	253
10	APPENDICES	277
	10.1 Appendix One: Publishers Cited in Abstracted Items in <i>The Penny Magazine</i> , Saturday, May 14 th , 1842 to Saturday, May 13 th , 1843.	

List of Illustrations

Thanks to The British Library, to The British Museum, to the Florence Nightingale Museum Trust, to The Principal and Fellows, Newnham College, Cambridge, and to Punch for permission to reproduce images within. All efforts have been made to contact the owners of images used here, but if any have been inadvertently omitted I would be happy to correct this at their request.

Page No.

- Figure 1.....69**
“Diagram of the Causes of Mortality in the Army in the East.” Taken from Nightingale (1858), *Notes on Matters Affecting the Health, Efficiency, and Hospital Administration of the British Army*. Reproduced courtesy of the Florence Nightingale Museum Trust, London.
- Figure 2a.....86**
An example of one of the Newnham College statistical cards of 1898-1900: front. Reproduced by kind permission of the Principal and Fellows, Newnham College Cambridge.
- Figure 2b.....87**
An example of one of the Newnham College statistical cards of 1898-1900: back. Reproduced by kind permission of the Principal and Fellows, Newnham College Cambridge.
- Figure 3.....110**
“The Fashionable Mamma,... or... The Convenience of Modern Dress.” February 15, 1795, James Gillray published by Hannah Humphrey (1796). Reproduced by kind permission of The British Museum
- Figure 4.....135**
“Publishing-Office of the ‘Illustrated London News’.” *Illustrated London News*, No. 47, 25th March, 1843, p. 218.
- Figure 5.....137**
“The Last Supper.” Engraved by J. Jackson, from the Print by Raphael Morghen – after Leonardo da Vinci. *The Penny Magazine*, 1834, Vol. 3, p. 93.
- Figure 6.....143**
“Essential parts of the Bobbin-net Machine.” *The Penny Magazine*, March Supplement, 1843, p. 117.

Figure 7.....144
 “The Composing Machine.” *Illustrated London News*, No. 26, 5th November, 1842, p. 413.

Figure 8.....145
 Frontispiece reference plate in Wilson (1816), *A description of the correct method of waltzing*, London.

Figure 9.....147
 Funeral coffin of Admiral Nelson. *The Times*, January 10th, 1806, p. 2.

Figure 10.....194
 “Rule Britannia” by Linley Sambourne. *Punch*, 15th July 1882. Reproduced with kind permission of Punch Ltd., www.punch.co.uk

Figure 11.....198
 Beaumont and English’s Compressed-Air Tunnelling Machine. *Illustrated London News*, No. 2235, 4th March, 1882, p. 224.

Figure 12.....199
 Visiting the Channel Tunnel. *Illustrated London News*, No. 2235, 4th March, 1882, p. 217.

Figure 13.....224
 How to carve beef, in Beeton (1861), *Book of Household Management*, Ward-Lock, London.

Acknowledgements

This thesis has benefited hugely from the support and involvement of a great number of people. It would not have happened at all had it not been for the financial support of the Arts and Humanities Research Council, to whom I am tremendously grateful. My supervisor, David Bawden, has been a great source of encouragement and I have developed a good friendship with him over these years. Thanks must also go to the Department of Information Science at City University for their enthusiasm towards a subject that was a move away from the more traditional fields of Library and Information Science (LIS).

Many people and many institutions have helped me during the research process. In no particular order, I would like to thank the staff of the British Library, particularly those in the Humanities and Rare Books Reading Rooms, and the newspaper archivists at Collindale. Caroline Roberts (archivist at the Florence Nightingale Museum), Karen Robson (Senior Archivist at the Wellington Archives, University of Southampton) and the archivists of the Reuters Company archive, all showed tremendous patience and knowledge in answering my questions. For the same reason, thanks also to Gillian Sutherland (Director of Historical Studies at Newnham College, Cambridge), and Anne Thomson (Newnham College archivist).

Discussions and conversations with colleagues and other academics proved invaluable. For this I must particularly thank Jutta Haider, David J. Bodenhamer, Chris A. Williams, Edward Higgs, Laura Skouvig and Mike Esbester. Also the Department of Cultural Sciences at Lund University in Sweden, the LON-LIS seminar group at City University, and those on the VICTORIA mailing list. Thank you also to Quentin Gummow for kindly offering to take on the task of proof reading the manuscript when he had much better things to do with his time.

I am not sure I would have survived the arduous PhD process had it not been for the fantastic support of my friends and family. My heartfelt thanks go to Helen Yallop, Madeleine Gabriel, Chris Eldridge, Ruth Maloney, Susan Mulvaney, Linda Roberts, Russell Williams, Julliete Losq, Sarah Williams, Kate Webber, Adrian Greystoke, Jordan Weller, and Chris and Denise Weller. Belated thanks to Jane Waller for first showing me the road less travelled, back in 1996.

Most of all I would like to thank my wonderful and endlessly encouraging fiancé, Edward Gummow.

I grant powers of discretion to the University Librarian to allow this thesis to be copied in whole or in part without further reference to me. This permission covers only single copies made for study purposes, subject to the normal conditions of acknowledgment.

Abstract

Historical interest in the information society and the tools and techniques of information processing and management has been the subject of much recent scholarship. In contrast, this research examines understandings of information from a *social and cultural* perspective and offers new insights into the chronology of 'modern' information.

The focus is on nineteenth century England and how contemporary society thought of and understood information. As a consequence of this, this work also investigates the role and manifestation of information according to these perceptions.

The research explores perceptions from a variety of nineteenth century viewpoints, including etiquette and behavioural literature, Victorian periodicals, events such as the Channel Tunnel panics of the 1880s and discrete individual case studies.

The thesis concludes that the nineteenth century formed the crux point between pre-modern understandings of information, and the start of what we would now term a period of modernity so far as information is concerned.

The foundation of the research is nineteenth century published and archival material, contemporary newspapers, journals and private papers.

Introduction

This study started with a simple idea. Or at least, it seemed a simple idea at the start. The aim was three-fold: to explore historical understandings of information, specifically those of nineteenth century English society; to explore these understandings in terms of social and cultural perceptions and manifestations rather than the tools and techniques of information processing, organisation and management in the past; and to develop information history as a conceptual and methodological tool of enquiry and demonstrate the potential scope and depth of this emergent field.

These areas are significant ones. Although the concept of information has been explored at length in our contemporary 'information society,' such explorations have not tended to translate easily into historical studies. Such existing scholarship has tended to imply that information has been understood as a constant, throughout modernity at least. There is little work that expressly challenges this idea. It seemed highly implausible that such constancy actually was the case and this invited further exploration.

Scholarship that has explored the history and origins of information has tended to do so with less explicit emphasis on 'information' and more on the *tools* and *techniques* of information processing, organisation and management in the past. This seemed a lopsided approach, omitting any focus on social and cultural perceptions and manifestations of information, which are just as significant to our overall understanding. Once again, this invited further study.

The field of information history is an emergent and dynamic one and it offers some new and exciting methodological approaches to studying past societies and cultures. It also allows new ways of exploring and understanding the origins of our modern fascination with all things 'informational.' There are ongoing debates on terminology and scope of what constitutes information history, and this research offered a practical way of

exploring an area with a specific information history methodology to see what it might contribute to the wider discussions of the emergent discipline.

These initial questions formed the basis of the research that follows, which has contributed significantly to and helped to refocus and challenge, the existing body of information scholarship. These contributions are discussed more fully at the end of Chapters One, *Definitions*, Two, *Methodology*, Three, *Individual Perceptions*, Four, *Etiquette and Behaviour*, Five, *Periodical Knowledge*, Six, *Panic and Awareness*, Seven, *Bringing it all Together*, and Eight, *Assessment, Evaluation and Future*.

The first chapter explores contemporary definitions of information and information history and introduces some of the key schools of thought in this area, including where my own understanding sits within this scholarship. Chapter Two looks in more detail at the theoretical and practical methodological issues, including a review of the existing literature in the field and associated fields of information history.

The empirical research is introduced in Chapter Three, which is presented as a series of discrete individual case studies in order to allow an introduction to the question of nineteenth century perceptions of information. Chapters Four, Five and Six, adopt a more thematic approach. They examine contemporary understandings of information, and its manifestations in terms of three socio-cultural areas. Chapter Four deals with etiquette literature and behavioural conduct, Chapter Five with knowledge and information in two Victorian periodicals, the *Illustrated London News* and *The Penny Magazine* and Chapter Six considers the impact of information access and awareness in the Channel Tunnel debates of 1880-1883. Each of these chapters have their own conclusions and are strongly interrelated with each other.

Following this, Chapter Seven attempts to bring all the research together and offers four thesis conclusions drawn from the findings of each of the chapters. The final chapter assesses the work and its contribution to existing information scholarship, concluding with some suggestions for future research projects.

This simple idea grew very quickly into a complex and interwoven exploration of nineteenth century social and cultural perceptions of information in England. The following pages offer a unique and fascinating insight as to how our nineteenth century predecessors understood what is now ubiquitous to twenty-first century society.

Chapter 1

Definitions: Information & Information History¹

Any study of information faces the problematic issue of definition. My doctoral research attempts to ask how the people of the nineteenth century understood information, both as a concept, and as a *thing* embedded in material form. Whilst we can never know for sure what people thought, we can use their words, writings, and social and cultural artefacts to explore how information was perceived and how nineteenth century contemporaries understood information.

These investigations hopefully will add another perspective to our contemporary discourse and debate on the question of information and of its role. However, it is all too easy to get tied up with questions of conceptualisation and methodology to the detriment of the research itself.

Defining information *per se* is not the purpose of this research, but the challenge of doing so is an issue that should be recognised and that is the purpose of this chapter. Other periphery debates involving meaning, understanding, conceptualisation, communication and so forth are deliberately not dealt with here. This is not because I do not regard them as valid or significant, but because the focus of this doctoral work is *nineteenth century* perceptions of information, and these are twenty-first century debates. I am also not suggesting that nineteenth century society had no concept of these debates, but it is specifically *information* that is relevant to this work. Unless they are directly relevant to the research, these broader areas are put to one side for the purposes of this thesis.

¹ Some of the ideas in this section were first presented in Weller (2005) and Weller (2007). They also benefited greatly from discussions with the Department of Cultural Science, Lund University, Sweden and with Edward Higgs at the Department of History, University of Essex.

There is such a vast literature on these subjects that it is difficult to address them at length when it is not the topic or scope of the thesis. It would potentially also detract from the significant research issue of exploring nineteenth century perceptions of information. This chapter examines some of the literature on information, attempts a personal definition and also defines information history, so far as my research is concerned. Setting out my understanding of the terms and how I have approached them in my work should allow for a more rigorous framework and less ambiguous understanding of the subsequent chapters.

1.1 What is Information?

Information is heterogeneous. It “is multifaceted, so... multiple definitions apply concurrently.”² The multiple definitions that information has been afforded in recent decades are a good example of the “language game” of Ludwig Wittgenstein, in which the meaning of a word should be identified by the way in which it is used, rather than by any single definition.³ In modern understanding “the word ‘information’ is arguably the most over-used and poorly understood English language term of the present time”.⁴ I add the disclaimer ‘modern understanding’ to Bawden’s original text to reinforce the vital distinction that I believe exists between contemporary discussion and definitions specifically related to information, and earlier ones which were less concerned with explicit understandings of information. Historically, certainly before the late nineteenth century, information has not been regarded as something necessary to define in its own right; this is a modern phenomenon related, amongst other things, to the rise of the discipline of information technologies, library and information science, and the so-called ‘information age.’⁵ This is discussed in more detail later in the chapter so this section is concerned only with contemporary literature. It does not profess to be a comprehensive

² Braman (1989), pp. 234-235.

³ Wittgenstein (1958).

⁴ Bawden (2001), p. 93.

⁵ See for example Day (2001).

summary, but rather introduces some of the key concepts of contemporary debates over the meaning of information.

1.1.1 Facts, information, knowledge

Information has often been defined in relation to facts, knowledge and wisdom.⁶ These examples are useful in the extent that they discuss information as part of a broader process rather than as an abstract idea or tangible thing, but in defining it as a process, it is easy to then become tied up with definitions of data, wisdom, or knowledge and at what point one becomes information, or information becomes another.⁷

This need to define the process of transition from one state to another is also a fairly recent one; as late as the nineteenth century, these words were all being used synonymously without an explicit desire to define each one.⁸ The linear sequence of modern interpretation often suggests a value-added progression, so that each stage (data-facts-information-knowledge-wisdom) becomes more useful and valuable than its predecessor, in a form of value process. Some scholars have even avoided the definition of information to concentrate on asking ‘what is knowledge?’⁹ In his exploration of social knowledge, Burke argues that

We also need to distinguish knowledge from information, ‘knowing how’ from ‘knowing that’, and what is explicit from what is taken for granted.¹⁰

However, once again we see the need to explicitly define each stage of the value process, introduced above, which as Ronald Day has argued, is a fundamentally modern

⁶ Meadow & Yuan (1997); Zins (2006).

⁷ Kaye (1995); Rowley (1998b), pp. 245-247.

⁸ Weller & Bawden (2006), pp. 138-140.

⁹ Burke (2004), pp. 11-13.

¹⁰ Burke (2004), p. 11.

invention.¹¹ I am not disputing that this process takes place, or even that it has always done so, but the need to *define* the process more *explicitly* is a more recent development.

Burke takes just four lines to define information and knowledge in a book of over two hundred pages, but even he makes a distinction between raw information and processed knowledge. For him, the definition is less important than the context, since the definition will always be relative to the latter. This is a variation on Wittgenstein and one which I believe is much more useful to adopt rather than to attempt a personal or singular definition. In the research that follows I have attempted to follow this style by defining information *in relation to context*.

The main ways that scholars have defined information are as a 'thing', process, or social construct, as a mathematical information theory and as information as all-embracing. Each is briefly summarised in the following pages.

1.1.2 Information as a thing, process or social construct

Information has also been related to the concept of a document, particularly in relation to knowledge management or organisation. The British Standard of Documentation 5408 calls it "recorded or communicated knowledge."¹² This kind of definition has the advantage that it is describing something tangible and concrete, but this also limits its use since the theoretical and abstract issues surrounding the information debate are ignored.

The notion of information as a thing also includes the idea of information as a resource. As Braman has argued, this is a popular definition in the fields of policy and business, although it tends to be rather general in nature.¹³ Others have argued that information is so wrapped up with the social and political aspects of life, which in turn influence and are

¹¹ Day (2001).

¹² BS 5408 (1976).

¹³ Braman (1989), pp. 235-236.

influenced by the economy, that information has an essentially economic value.¹⁴ Buckland has described information in terms of a 'thing,'¹⁵ while others have suggested that information is created collaboratively, or is socially constructed.¹⁶

This application of information is also inclined to emphasise the uses people make of it rather than the effects it has upon people and society (or vice-versa), an example of which is demonstrated well by Oppenheim *et al*'s study of the use that information professionals made of the asset of information.¹⁷ A particular problem with viewing information as a thing is summarised by the Eaton-Bawden paradox, which shows the difficulty in treating something as intangible and immeasurable as information as a physical resource,¹⁸ most significantly that information is non-rivalrous: its consumption by one individual does not prevent simultaneous consumption by others. Clive Holtham also makes this point in his discussion of two reports by Loughborough University, which addresses the usefulness of valuing information as a resource or commodity.¹⁹ While perhaps relevant to business or policy models, defining information in this way limits discussion of the philosophical and theoretical aspects of the information debate, quite aside from presenting practical problems of how to value and measure information.

1.1.3 Information theory

In mathematical terms, information theory was a term first used by Claude Shannon in the late 1940s. Shannon's use of information in this way was related more to signals and codes used by computers and communication systems. However, it has remained as part of the language of the computer sciences and the notion of information has also gained a standing in the core sciences of physics and biology.²⁰ Later work by Shannon & Weaver

¹⁴ Stigler (1961); Hayward & Broady (1994); Rowley (1998a).

¹⁵ Buckland (1991b).

¹⁶ Belkin (1990); Talja *et al* (2006).

¹⁷ Oppenheim *et al* (2003).

¹⁸ Eaton & Bawden (1991).

¹⁹ Holtham (2001).

²⁰ Bawden (2001), p. 94.

defined the 'bit' as a measure of the information that could be transmitted in any message, thus making information measurable and quantifiable.²¹

Whilst I do not dispute that a mathematical theory of information is relevant in some spheres of research, this usage of the term has little relevance to my own research. Although this allows information to be measured, it has no interest in the questions of meaning and effect, and is therefore of limited value to anyone who wishes to relate the concept of information to a philosophical or social enquiry. It is mentioned here simply as an alternative example of information understanding.

1.1.4 Information as all embracing

Rowley has argued that "information shapes our perception of the society in which we live" and that "information is all around us."²² In his analysis of the concept, Buckland took a similarly broad view, defining information as that which can be used about things, about processes and about knowledge, that which can be abstract or concrete (tangible/intangible), and can be an entity or a process.²³ In some ways Buckland's definition is very useful because it can be applied to literally anything and is not limited to a physical form, or the LIS domain. It demonstrates how all-encompassing the concept of information can be:

*We conclude that we are unable to say confidently of anything that it could not be information.*²⁴

However, it could also be argued that its very broadness creates problems, since if information could, in theory, be anything, then potentially the definition becomes too vague to be useful. There is certainly some truth in this, particularly for those who are

²¹ Shannon & Weaver (1949).

²² Rowley (1998b), p. 243.

²³ Buckland (1991a), p. 6.

²⁴ Buckland (1991a), p. 50.

trying to apply a definition to technology or information systems. What is certainly a weakness of Buckland's view though, is his attempt to relate the notions of information and the informative where the suggestion is that not only is information all embracing, but also that everything is also inherently *informative*. This causes problems because for something to be informative, it creates a subjective relationship with the person or thing being informed. One could argue that everything has the *potential* to be informative, but not that it inherently *is* informative.

This section demonstrates the breadth of potential definitions for information, and it has only touched the surface of the literature available. My own view is that such definitions are not particularly useful to the *historical* study of information, since information should be defined and understood in relation to the historical context, which changes. Therefore, in a sense, what matters is not *what* information is but *how* society perceives it.

The following sections suggest why I believe this to be the case and also suggest a way to conceptualise information in a manner that provides an applicable framework for my research.

1.2 Defining information historically

Alistair Black is one of many who have warned of the difficulties in defining information; that the very ubiquity of information in modern society is so vast that it becomes impossible to define. Information is not unique in this respect.²⁵ The very intangibility of information raises questions about its nature and properties, presenting problems for any potential information historian. Black asks:

²⁵ As Vic Gatrell has observed in his historical study of humour, the inherent problems in "writing about a subject as open-ended as this, with no simple chronology or precedent to follow." He continues that, "humour is as plausibly a historian's subject as any other, and it allows us to say new and important things" (2006, p. xxi).

If information itself defies precise definition, what chance is there that its definition might be historicized?²⁶

Information is in essence ubiquitous and multi-defined in our own society. How then can we begin to impose a single definition in our contemporary society, let alone impose this definition upon the past? Indeed, as Neil Postman has argued, there was a clear change of thought, from the seventeenth century to the end of the twentieth century, as to how people understood information. For him, until the mid-nineteenth century, information was “a rhetorical instrument” where the idea of information was not separated from a specific purpose.²⁷ By the mid-1800s he argues that technology, such as the telegraph, allowed information to be context-free and not tied to any function that it might serve.

Given the massive transformation brought about by the printing presses in the Enlightenment, Postman asks why this era has not been referred to as the age of information. For him;

The answer, I think, is that the concept of ‘information’ was different from what it is today.²⁸

To an historian, perhaps, this sounds self-evident, to an information scientist perhaps less so, yet few scholars have really addressed this issue. It is fundamental to my own argument and research and of course begs the question, what was the concept of information *then* (whenever ‘then’ may be)? Although I do not profess to cover the entire period to which Postman refers, my research does try to shed some light on how information was understood in the nineteenth century (in England at least).

One of the limitations of Postman is that he has little empirical evidence to support his arguments. This is another reason, if one were needed, of the validity of my own

²⁶ Black (2006), p. 2.

²⁷ Postman (1999), pp. 87-88.

²⁸ Postman (1999), p. 85.

research. In contrast to Postman's, my study is firmly based in the primary sources; over five hundred contemporary documents have been studied from pamphlets to poetry and to private letters. Around two thousand pages of nineteenth century newspapers have been examined. A further two hundred or so secondary materials have been consulted, to give as full an understanding as possible of the contemporary context, the bigger socio-political events, and the backgrounds of specific individuals discussed. By framing the ephemeral idea of information to 'pegs' such as these we can begin to find a way to explore and investigate it historically.

I realise that as a scholar working in this area, I need to give some sense of my world-view but I think it is equally important that I (or any other information historian) retain some distance from this when I am attempting to study historical understandings of information, in order to be able to begin to understand how different peoples, sexes, races and eras, understood the concept of information in their own time.

Just as there is not (and most likely cannot be) a single definition of information in the twenty-first century, nor was there likely to have been one in any other period of history. I have already mentioned the lack of homogeneous opinion in the nineteenth century – and thus any conclusions made by my research are introductory and exploratory. However this lack of absolute definition does not necessarily present a problem:

It simply means that we must be aware that the notions of information, knowledge, the information society and other information science ideas are often modern phraseology, and their application to the past can risk being anachronistic.²⁹

I would argue that in terms of information history, it is not necessary or desirable that there should be one single definition of information – such a definition is so skewed to the context in which it is created that it serves little historical purpose – each era will define it in a new way according to its own values and world view. It is necessary

²⁹ Weller (2007), p. 443.

however, that the information historian is aware of his or her attitude towards information so it can be acknowledged in light of the research. In recognising our own interests and beliefs, it becomes easier for the reader to understand why the research may have been directed in a certain manner.

In addition, these changing definitions in themselves, between researchers, and between historical contexts, allow an insight to the historiography of information. By examining changing perceptions of information we can see trends and relationships from the wider influence of society. In itself this is fascinating. More recently:

The emergence of information history and digital history in the last decade, for example, has to a great extent been down to a reinterpretation of history, based upon the contemporary values and concerns of the information society.³⁰

Or;

... to try to define the peculiarities of the present more precisely by viewing it in the perspective of trends over the long term. Current debates have often stimulated historians to ask new questions about the past.³¹

This kind of historiography is a topic of enquiry in its own right. From this perspective, it could be argued that not only does my research serve as an example of how information was conceptualised and used in nineteenth century England, but also that I, as a scholar, fit into a bigger trend of the historiography of twenty-first century researchers. It can be interesting to see how the dominant themes of a society influence the choice of subjects studied.

The climate in which we live affects our perceptions of certain subjects, and these trends are as academically valid as empirical research itself. I would argue that my research focus is an example of what Jon Agar has described as:

³⁰ Weller (2006).

³¹ Burke (2004), p. 2.

Potential in a new informational history.³²

Indeed this is particularly valid for researchers who have developed their ideas within the climate of the so-called information age. I recognise that I am one of those researchers.

1.3 My world-view

In my research, nineteenth century *perceptions* of information are explored; that is, contemporary understandings, discussions and attitudes towards information. To some extent this considers the concept of information, as an abstract idea, but in order to be able to draw some conclusions about perceptions of information, it is necessary to study the role and manifestations of information embedded in material form in nineteenth century England.

In other words, the research explores English nineteenth century perceptions of information and as a consequence of this, it also investigates the role and manifestation of information according to these perceptions. My *personal* definition of information is superfluous to such a research framework.

It is only by exploring these and understanding the socio-cultural, political and economic climate in which they were created, used and discussed that we can begin to relate them to more abstract discussions of information in poetry, private letters, pamphlets or journal articles. The two are strongly interrelated and it is only through examining them together that we can begin to draw some conclusions about how information was perceived in the nineteenth century. This leads neatly back to the question of definition.

Essentially I am arguing that each era, each society, and each individual, potentially perceives information in a different way, according to the contemporary environment and

³² Agar (2003), p. 13.

attitudes. As an individual, my own environment undeniably also influences me and this affects my research choices and approach. Mine is one of many. Another researcher may choose to study the same source material and come up with completely different conclusions and interpretations because they have different contemporary environments acting upon them; such is the nature of historical enquiry.³³

Thus, although I offer here my own perspective of what information is, I also stress that definitions of this kind can be less relevant to the historical study of information than for other types of information research that require a more specific focus.

With that disclaimer, here is my own perspective. I believe that information can be both an abstract concept and a concrete phenomenon, without the two being mutually exclusive. Both these forms of information are socially constructed and to understand one, you must explore the other and vice-versa, as an ongoing and two-way process.

In essence, this doctoral research also explores the conceptual idea of information history through the empirical study of concrete information artefacts. The focus of the thesis is three-fold and strongly interrelated:

- Nineteenth century English perceptions of information
- The role and manifestation of information embedded in material form in nineteenth century England, according to contemporary perceptions
- The conceptual idea of information history

³³ For a less contextual but very good example of such a situation is the historiography of the two world wars. After 1918, many historians explained the war as a combination of forces pushing Europe towards war, such as nationalism, imperialism, militarism and the system of alliances. However, after the Second World War, the view of 1914-1918 was re-evaluated in light of the recent events of Nazism and the Holocaust with many historians arguing that Germany was following a *Sonderweg*, or special path, of history leading towards war. Both views are potentially valid; they are just different perspectives. See Fay (1929); Taylor (1945); Fischer (1967).

We can discuss the concept of information and we can discuss the form and role of information, but we can only understand this through our interaction with the social, cultural, or political values of our society, and through language, which provides human meaning.³⁴ We can discuss how information is manifested, produced or disseminated, but we can only do this through reference to objects created by humans; ultimately all information resources are physical. And of course, human society changes over time and thus so does the context and understanding of information, which is where the concept of information history becomes valid. But we can define 'information' loosely as "symbolic content which when exchanged in space and time between entities has meaning for them," a definition originated by Edward Higgs and Toni Weller.³⁵

I am aware that these statements may be contested and that there is also a great deal of literature available on other perspectives. For the purposes of this research, I am stating my personal world-view as clearly and unambiguously as early as possible.

This world-view has inevitably affected the way in which I have pursued this research. It is impossible for any historian to leave all modern understandings behind and study the past totally objectively. The things you choose to study, the sources you examine, are all influenced by the present. Nor is this something that is limited to the humanities or social sciences. Contemporary scientific research can be argued to be just as subjective in terms of the topics and methods chosen by individuals to study.³⁶

This is not necessarily a bad thing, nor is it detrimental to the outcome of the research, since:

³⁴ This of course touches on another debate about the role of 'meaning' and 'understanding' but it is not one I am going to engage with during this thesis.

³⁵ This is the definition used in the funding proposal to the AHRC for an international information history workshop, submitted in July 2007 by Edward Higgs and Toni Weller.

³⁶ Grobstein (2005).

Subjectivity... can be viewed as a positive generator of new observations and new stories by examining contemporary cultural values and behaviour... a historian's perspective is not regarded as a limit to their objectivity, but instead, it can be seen as a positive - a way of distancing oneself from the period or issues in question and adding something new from another perspective.³⁷

This research, in some part, reviews old material with new insights, thanks to having a different perspective.

It is impossible for an historian or for any scholar to be entirely objective in their research. Contemporary interests and society inevitably affect the way we view the past and shape what we chose to research. This is a well-recognised issue in the historical community and one that has been the centre of much discourse; from E.H. Carr's dictum, that you should study the historian before you study the facts,³⁸ to postmodernist views that there is no possibility of an objective history.³⁹

Williams has argued that since we can only view the past from the present, "the usual solution is to be acutely awareness of presentism." Thus;

Contemporary concerns may not inevitably lead the historian into illusion. They may instead lead her to keener awareness of elements of the historical record that deserve closer attention.⁴⁰

This seems a highly valid argument and one that is particularly relevant to the discussion of information history. Likewise, Richard Evans' view that:

³⁷ Weller (2006).

³⁸ Carr (1961).

³⁹ See for example, White (1987); Hutcheon (1988); Jenkins (1991).

⁴⁰ Williams (2000), p. 646.

It really happened, and we really can, if we are very scrupulous and careful and self-critical, find out how it happened and reach some tenable though always less than final conclusions about what it all meant.⁴¹

As later chapters demonstrate, the people and society of the nineteenth century certainly had some kind of perceptions about what information was, how it was used and how it developed and changed. These views were not homogeneous, but were as highly flexible and fluid as was society and culture in the 1800s. In order to make these views valid research conclusions, albeit preliminary and exploratory ones, it is essential to practise a sound historical research methodology and to be, as Evans argues, self-critical and conscientious in the sources examined.

1.4 Information History

So, information history is the historical study of *information*, (or in this case, the perceptions of information). The difficulties surrounding the definition of information have been discussed above and I think it is important to stress the need to contextualise the study of information to provide a definition rather than attempt to impose any singular definition, which can detract somewhat from the bigger picture.

Thus a key characteristic of information history is not just an interest in information in all its manifestations throughout the past, but also, critically, an application of good historical practise. This can be distinguished from other forms of information science dealing with historical topics: information history's methodology is anchored in the discipline of history.

This anchoring should be practised as the norm, but often it is not, especially by researchers who are examining historical themes when they have no historical training. One serious criticism of many 'historical' information science works is that they apply or

⁴¹ Evans (1997), p. 253.

impose twenty-first century terms and ideas onto a historical background, using them in an ahistorical and anachronistic way, as discussed above.

I realise that I could be on dangerous ground here. I am proposing information history as a non-anachronistic study of the past, yet in its very essence, information history is a creation of the present – of the value we place on information and its role in society. However, I would argue that this is the case with any form of historical study and indeed any researcher chooses their research field due to their own interests and values. Information history is not unique in this aspect.

1.5 Contribution to Knowledge

This chapter has shown that information is fluid and multifaceted in our own modern times and it has been understood, defined and described in many different ways by many different scholars. I adopt the approach that information does not need to be explicitly defined, particularly in historical research, and that the context and contemporary understandings are much more useful than attempting to fit any singular meaning onto a diverse history. These ideas of information history have been explicitly recognised as valid by recent information scholarship.⁴²

My research examines aspects of popular culture and society (as opposed to technology and state) in nineteenth century England. It explores how contemporaries understood information, how *they* used it and spoke of it, as both an abstract notion and also through its embodiment in cultural artefacts, and how the wider socio-political climate and context interplayed with these understandings. The original research provides an alternative insight to the Victorian period and to the broader historiography of information. The next chapter explores how my research fits into the existing work in this field.

⁴² Black *et al* (2007), pp. 8-10.

Chapter 2

Literature Review & Methodology

2.1 Introduction

My research is focused around the field of information history as defined in the previous chapter. Specifically, how information was thought of and used in a social and cultural capacity, as a distinct move away from the dominant traditions of thinking of information in terms of its technological or organisational tools and processes. So much of the existing literature has focused on the technological or organisational role or impact of information, that there has been a lack of any real engagement with its social and cultural aspects and understandings. The latter therefore form the focus of study for this research. This chapter explores the existing scholarship in the area of history and information science and explains why information history, and thus, by extension, this doctoral research, is innovative, necessary and significant. Following this, the ideological and practical research methodologies for the following chapters are discussed and justified.

2.2. The Theoretical – The Existing Literature

2.2.1 History or Information Science?

The title of this thesis begs one immediate question of the subject matter; in which academic field should it sit - history or information science? It is proposed here that it encompasses both and that there is no reason why the two should be mutually exclusive. To that end, this chapter attempts to justify that position and explains how the research

will be attempted in terms of both ideological approach (information history) and research methodology.⁴³

To some schools of thought, the two ideologies and approaches of history and information science are completely separate and distinct. However, a degree of overlap is not only possible but also beneficial and, increasingly in recent years, encouraged. Information science and history can be regarded as a further step on from the fusion of subjects such as geography and information science (GIS), or law and information science (intellectual property, copyright, data protection within 'cyberspace'). While these latter approaches are in my view a very positive thing, they do still retain the emphasis on the here-and-now, the 'information society' age and the practical application of these disciplines. The focus tends to have a technological aspect, whether that is by directly using technology for geographical positioning, or more indirectly by applying established principles of law to contemporary technologies.

2.2.2 What has gone before

There have already been some attempts at interdisciplinary work in this area. Information scientists have been using variations of the terms 'historical information science', or 'historical informatics' for the last couple of decades.⁴⁴ Similarly, there have been historians who have focused on the history of science and technology, or the rise of the 'information state.'⁴⁵ However, somewhat understandably, each of these writings has still ultimately been focused upon its own discipline and has to a large extent neglected the methodologies and ideologies of the other, thereby overlooking trends and similarities that could provide key opportunities for revisionist study.

⁴³ This chapter is in part based upon my paper presented at a seminar to the Department of Information Science at City University, London on 20th July 2005, *Informational History – A New Discipline*; and also Weller (2005, 2007).

⁴⁴ Marvin (1987); Karvalics (1994); Warner (2000); Karvalics (2003).

⁴⁵ Eastwood (1989); Agar (2003); Flichy (2004); Higgs (2004).

Of particular interest here are analyses by historians that consider themes central to information science and 'historical' works by information scientists. Examples of the former include Eisenstein's analysis of the printing press as an agent of change, Eastwood's look at the State's use of information in the nineteenth century, Winston's account of the telegraph and telephone and Robertson's discussion of hypertext history.⁴⁶ These are historians who, intentionally or not, are embracing some of the concepts of information science into their own work; communication, control of information, role of new technologies and digital media. These kind of historical accounts tend to fall into two broad categories. First, those which have a tendency to consider the impact of communicational and organisational mechanisms and tools, but not of information itself (such as Eisenstein, Eastwood and Winston); and second, those which consider new ways of teaching, researching, or studying history by utilising new media forms and digital technologies (such as Robertson). These are all relevant areas of historical study, but they take information itself for granted within their discussions and do not consider its contextual impact.

Recent work by Information Scientists Boonstra *et al* covers similar ground as Robertson by looking at the "past, present and future of historical information science."⁴⁷ Here we see a recurring trend since what is actually being discussed is how computer and digital technologies can be used within the historical community to facilitate research, teaching and the storage and retrieving of information, or in other words, "computerised methods to be used in historical science."⁴⁸ This is undeniably important in deepening relations between information or computer scientists and historians (and follows the trend of geographic information science), but it is not what I would term 'information history' as defined in the previous chapter. It is too focused on the technical, on the practical application of informatics in historical study, rather than on the historical past itself.

⁴⁶ Eisenstein (1979); Eastwood (1989); Winston (1998); Robertson (2004).

⁴⁷ Boonstra *et al* (2004).

⁴⁸ Boonstra *et al* (2004), p. 9.

Information scientists, when attempting to trace the history of the discipline, have also written about the nineteenth century.⁴⁹ However, these works, almost without exception, focus on the development of specific communication technologies and ways of organising information - the telegraph and telephone in particular and later the radio, typewriter, classification schemes – without considering the differing contexts in which each of these technologies emerged, or their contemporary impact. Some information scientists, such as Karvalics and Warner,⁵⁰ use the term ‘historical informatics’ to describe this focus on the historic development of certain scientific methods and technologies. These accounts have a tendency to be deterministic and often at least indirectly support the idea of a teleological progression into the ‘ultimate’ form of information society. These accounts are reductionist, ignoring the role and impact of social values and cultural norms on the development and integration of technologies. While they have value as discreet studies performed from a certain perspective, they are teleological and could be considered misleading in this context.

Selected historians have already made similar thematic approaches to the history of a particular technology or organisational model.⁵¹ However, these have often been regarded as part of the fringe subject of the history of science and technology, whose focus is consequently not on the informational impact and context. So, Jon Agar’s fascinating work on the government machine is written from the perspective of the history of science and technology, rather than with an informational context, as is his research interest. Similarly, Edward Higgs’ wide writings on the history of censuses and surveys, civil registration and the impact of the digital revolution on archives can be seen through his focus on these themes when he writes about the ‘information state’. In other words, although both Agar and Higgs are aware of the historical context of the periods they are writing about, they still focus upon the practical, technological and organisational issues, rather than examining the contemporary social, cultural, and political impact of such

⁴⁹ Beniger (1986); Schement *et al* (1987b); Bawden & Robinson (2000).

⁵⁰ Karvalics (2004); Warner (2000).

⁵¹ Pool (1977); Winston (1998); Pope (2001); Agar (2003); Higgs (2004).

information themes. What it does show once again is the emergence of overlap in methodology and content between history and information science.

There remains a focus on *technologies* within existing ‘interdisciplinary’ work by historians and information scientists and it is this technological determinism that information history attempts to avoid.

Therefore, this research uses this existing work as a foundation on which to examine an area largely unexplored by either historians or information scientists. It uses social and cultural sources rather than technological or organisational. It looks at perceptions and understandings of information and how those views changed, rather than looking at information technologies or information management. It looks explicitly at the nineteenth century, rather than more contemporary explorations in the modern ‘information society.’ As the title of the research proposes, the following chapters explore social and cultural perceptions and understandings of information in nineteenth century England, which existing scholarship from both disciplines has hitherto predominantly overlooked.

In Daniel Headrick’s examination of *Technologies of Knowledge in the Age of Reason and Revolution, 1700-1850*,⁵² we see an example of this odd mix of contemporary interests in information technologies influencing a historical re-evaluation, to the detriment of the contextual influences upon those technological changes. Headrick argues that intellectual historians have tended to focus on the age of enlightenment and reason, especially the ideas of Voltaire, Kant, and Rousseau (amongst others), yet there was another, overlooked “kind of intellectual transformation ... the demand for information, its supply and its organisation.”⁵³ Such new ideas and cultural changes driven by social, political and economic upheavals led to new demands for information systems. His argument is convincing and the interaction of intellectual and cultural thinking with developments in technology cannot be denied in any age.

⁵² Headrick (2000).

⁵³ Headrick (2000), p. 9.

However, Headrick chooses to focus on the technological and organisational tools of information, as so many information scientists have done when attempting 'historical informatics'. In doing so, he overlooks the fact that the very political and intellectual ideas of J.S. Mill, Walter Bagehot, Alexis De Tocqueville, Thomas Carlyle, and Jeremy Bentham in the nineteenth century were irrevocably tied up with sociological changes, and that the advances in technology were a result of and accepted in the mainstream because of, this cultural context.

Despite its validity, Headrick's work is frustrating because it implies the importance of cultural and intellectual thought, but never explicitly discusses them in regard to information itself, only in terms of information processing and organisation tools. In this research, the attitudes and sensibilities of nineteenth century men and women towards the concept of information itself, rather than its tools for collection or dissemination, will be explored. This approach, of examining historical perceptions and understandings of information, provides some new ways of thinking about information in our own contemporary society.

So far as information is concerned, in the twenty-first century we seem to be concerned with privacy rights, dissemination of information, freedom of information, surveillance concerns and so on. It is this context that influences the contemporary dominance of intellectual discussion around information systems, organisation and processing. This dominant train of thought in our own society has therefore distorted our re-interpretations of the past. While it has allowed valuable re-evaluations of how past societies organised, collected, and processed information, it has overlooked how these societies actually *thought about* information, and how *the concept of information itself* has changed with society, as well as its technological tools. This is fundamental to my view of information history and, more specifically, to this doctoral research.

2.2.3 The Significance of Information History

The existing research is valuable in many ways, but what information history, as defined in the previous chapter, can add is a revision and challenge to accepted views of both historians and information scientists. It is an additional way of considering things, allowing for a deeper understanding of the role information and its uses (and misuses) has played in the past. History is, after all, a dynamic, changing story. One of its key purposes is to provide understanding of change and information science as a discipline is often regarded as being a manifestation of a rapidly changing society.⁵⁴

I would argue that the information science discipline itself is too often regarded as purely technological, or computing based. Alternatively, the informatics stereotype is that of library science, whether that is applied to traditional information organising and processing tools, or the study of their new applications in business and the corporate world. As Weller and Haider have recently suggested, the LIS discipline is to some extent still trying to justify itself and often this is done by stressing recent developments in communication and information technologies of the last fifty years or so and the socio-economic impact they have had.⁵⁵

A benefit of information history is that it also allows for a deeper discussion of the issues central in our own culture (the information society, digital divide, information literacy, privacy rights, etc), enabling us to place them in their wider historical context and flesh out a more three dimensional picture of the thematic roots of information science. In other words, “our contemporary interest in information should be understood in its historical context in order for us to appreciate the depth and longevity of the fundamental issues with which we are dealing today.”⁵⁶ As has recently also been argued, information

⁵⁴ Saracevic (1999); Warner (2000).

⁵⁵ Weller & Haider (2007).

⁵⁶ Weller (2007), p. 439.

history can encourage a philosophical and conceptual understanding of information and has a valid argument for inclusion on the curriculum of LIS degrees.⁵⁷

As we have seen above, generally, existing work falls into one of two groups: either historical informatics (that is, the application of new technologies to the study of history), or the history of a 'modern-day' concept, institution, or technology, such as the computer or surveillance. In this research, I am not proposing the 'history of information' in terms of its organisational or communicational tools (as significant as these were at the time), but rather, the sociological and cultural implications of information *itself*, in all its manifestations. Neither am I suggesting the history of informational institutions – libraries being the obvious choice, but research facilities, government intelligence departments, and specific newspapers, or even the internet, all fall within this scope. I am not tracing the origins and development of an existing institution or thing through time; rather, I am looking at information in its social, political, cultural, and economic context at a given moment in time.

Alistair Black has been a strong advocate of library history, a slightly different proposition to information history, but one that attempts a certain degree of fusion between history and information science. For him, library history is the history of libraries, as a particular type of institution and their roles within society, but, significantly, he also stresses the importance of recognising the wider sociological impact of such institutions.⁵⁸

In his proposals for a stronger historical focus within information science, Black supports the concept of a new discipline of information history, by arguing that "it is feasible to conceptualise rich investigations into the role played by information historically."⁵⁹ The key point to pick up on here is that he is not laying so much emphasis on the technological, although given his library sensibilities, he does talk of exploring "the

⁵⁷ Weller (2007).

⁵⁸ Black (1995).

⁵⁹ Black (1998), p. 40.

implications and meaning of the collection, organisation, and dissemination of information within historical settings.”⁶⁰ Because he is still looking at technological and management tools of information, rather than the concept of information *itself*, he limits the scope of information history to the “age of modernity.”⁶¹ Within the scope of information history defined in the previous chapter, there are no such limitations, since information transcends period. To understand and study it in multiple contemporary and contextual terms gives us a hugely rich and intriguing field of research.

I do not suggest, as several others have done,⁶² that this approach is confined to modernity. Instead, as argued above, I propose that information history could, and should, be applied to any historical period. Black argues that the reason we should focus on the modern period, post-Enlightenment, is that since then, information has been commodified and converted into a thing, which was not how information was conceptualised in the pre-modern world. His argument is surely incomplete though, as this begs the question, how *was* it conceptualised in the pre-modern world? Information history is not confined to the modern world, because it does not seek to find a teleological link to the present, nor is it constrained by the development of organisational and communication tools to manipulate it. Instead, information history seeks to understand how the idea and content of information was perceived and the influence it had, within the societies and contexts of a particular given time.

This is not to suggest that all information historians study all periods; quite clearly this would be both unworkable and unrealistic. There are of course obvious practical limitations of evidence and sources the further back you go, but historians understand the sources and documents of their periods. They understand where documents can be found, the limitations of evidence and the weight of certain evidence over others. Just as there are specialist political, cultural or economic historians of differing eras who understand the contextual subtleties of their period, why not ultimately also specialist medieval,

⁶⁰ Black (1998), p. 40.

⁶¹ Black (1998), p. 40.

⁶² Black (1995, 1998); Headrick (2000).

renaissance, or modern information historians?⁶³ The reasons this research focuses on the nineteenth century as opposed to any other period are discussed below.

2.2.4 Where Information History fits in Relation to the Information Science Discipline

Where would such a methodology fit within the existing framework of information science? To answer this would mean having a more focused breakdown of what information science actually *is*, and what it covers. Alistair Black, the most vocal supporter of a true historical slant to information science, has argued that information science lacks coherence as a discipline, covering research interests as varied as computer science, library studies, linguistics, documentation, bibliography, information (or signal) theory, communication theory, management theory and so on.⁶⁴ Machlup and Mansfield agree with this view, claiming, “the information sciences are highly diverse. Someone who speaks of information in his own context may know of someone else who uses it in a different context, yet never find the occasion or the impulse to explore the similarities and differences.”⁶⁵ This has caused problems of conception over the scope of information science, both to those inside and outside the discipline.

There has been much written about the structure of the discipline and I would support ideas along the line of those proposed by Fritz Machlup as early as 1983, which suggested that the information sciences, in the plural, should be used as an umbrella term much in the same way as the social sciences, or the natural sciences. Under this umbrella, he proposed there would be four ‘information’ fields of study – to paraphrase; the theoretical; technical & computing; librarianship; and an area for new evolving areas of study, or special interest research. This approach makes sense of the vast differences between existing research areas, while also acknowledging their relationship with information. Under such a structure, information history, as it is defined here, could easily fit within either the theoretical or the specialist fields, although it is my belief that

⁶³ This paragraph was originally published in Weller (2007), p. 440.

⁶⁴ Black (1998).

⁶⁵ Machlup & Mansfield (1983), p.x.

ultimately the field of information history is significant enough to stand on its own rather than under the umbrella of information science.⁶⁶

2.3 The Practical – The Research Methodology and Design

2.3.1 Chronological Scope

The period under consideration is the nineteenth century, 1800-1900. I felt that it was important to take a long view of the century to gain a better sense of perceptions of information and to be able to notice any changes or developments. Of course, with a period of a hundred years, it would be impossible to cover every aspect of information or society. Therefore I decided to focus each chapter on a different aspect of nineteenth century England in order to gain a wider perspective of how information was understood and used. These chapters will be discussed more fully below.

Since any historical segmentation of time is somewhat arbitrary, I must stress that although the research in terms of sources used falls between 1800 and 1900, perceptions and understandings did not stop and start, or abruptly change, at these cut-off dates. There was clearly a degree of overlap and continuation, as well as change, between the eighteenth and nineteenth centuries, as well as the nineteenth and twentieth. However, whilst acknowledging this, for clarity of understanding it is necessary to focus the research on a particular period. I chose the nineteenth century for two reasons.

Firstly, the nineteenth century is where most of previous ‘historical’ information science work has been focused and so it makes sense to use the same period for my information history approach. This has the benefit of being able to use existing scholarly studies as a comparison and contrast and of being able to offer an alternative perspective to that which already exists.

⁶⁶ Weller (2007).

Secondly, it is the historical period with which I am most familiar and interested, having previously specialised in Victorian England and Europe at degree level. This is not insignificant since it means much of the background context and familiarity and awareness of sources is already present, allowing a richer understanding of contemporary material. The huge changes brought about by industrialisation meant that language and the meaning of words and the introduction of new ones, also changed more rapidly during the nineteenth century than they ever had before.

2.3.2 Geographical Scope

The research has been limited to England and English perceptions, although necessarily also includes events occurring overseas, so far as they affect or are related to the people and events discussed here. Continental authors have written some of the sources studied, but they were all published in English.

Contextually, it is important to be aware of the influence of Europe, the United States, and the British Empire upon English politics and society at this time, as they had a huge impact on how English men and women perceived themselves in relation to those overseas. Obviously due to the scope of the research project I will not be able to take a detailed look at the Empire, English relations with the Continent, or even a focused look at the whole of England herself, but it is hoped that an introductory examination will provide some preliminary insights. These may be extended by further research, suggested in Chapter Eight.

I specify England and not Britain, since I am excluding Scotland, Wales, and Ireland, although as with Europe and the Empire, the politics of these countries, particularly those of Ireland, did affect England during the nineteenth century and will be alluded to where relevant. Significantly, for many nineteenth century English people, the events of Glasgow or Cardiff were less relevant and interesting than those of London, Paris or Berlin. To be true to *English perceptions* then, as the title claims, the emphasis should be

on understanding these inter-relations, which were more cultural than geographical (or more complex than geography might suggest).

2.3.3 Research Questions

In such a young disciplinary area as information history, where practical research methods are vague and unclear, I have made several assertions relating to the design and methodology of this thesis. The research is primarily historical; a study of primary source documents from the period, supported by secondary scholarly works.

The research is qualitative, empirical and conceptual and this is reflected in the research questions:

1. To contribute a genuine interdisciplinary study which can be used and valued by both the Historical and Information Science communities.
2. To explore what was understood by the notion of 'information' in nineteenth century society and why this changed or remained constant over the period.
3. To determine if a social and cultural focus can contribute alternative ways of thinking about the Victorian information society.
4. To establish if there are continuities or changes between perceptions of information in the nineteenth century and our own society.
5. To explore changes in the ways in which people received and disseminated information.
6. To judge the affects of the social, political, economic backgrounds and contexts on contemporary perceptions of information.
7. To examine how the government, media and public used information.
8. To consider how a social and cultural view of information might relate to the existing literature on the organisational and technological Victorian information society.

In terms of empirical material, the research relies upon a variety of contemporary nineteenth century sources. The specific materials for each chapter are explained below and in more detail throughout each chapter, but essentially the sources for the whole work included private and published letters, diaries, published pamphlets, published speeches, official government reports, newspaper reports, cartoons and illustrations, memoirs, dictionaries, and reference tools.

The styles of each chapter are somewhat different in terms of the sources used. Chapter Four, *Etiquette and Behaviour*, is a very broad examination in scope and chronology for example, whereas, Chapters Five, *Periodical Knowledge*, and Six, *Panic and Awareness*, are deliberately much more limited in their focus on 1842-1843 and 1880-1883, respectively. This was necessary to give the research as much scope as possible for understanding nineteenth century perceptions of information. It also allows a contrast in research approaches that demonstrates the richness of this subject area.

For those unfamiliar with nineteenth century England, there will need to be some degree of explanation and context setting, which will be provided within the chapters as is relevant, to ensure that it is clear where my own research and argument sits within its contemporary context. For ease of reference, each chapter includes a brief overview of the contemporary events referred to within it, and footnotes to further reading are provided where relevant.

The focus has generally been on the literate classes, which inevitably has meant more of a focus on the middle and upper strata of society. This is largely due to the fact that fewer written sources have survived by the working or illiterate classes. This nonetheless provides a compelling base from which to explore the social and cultural perceptions and understandings of information in nineteenth century England.

2.3.4 Chapter 3 – Individual Perceptions, pp. 48-89.

This chapter focuses upon four individuals and their perceptions of information at certain points in their lives: the Duke of Wellington, Florence Nightingale, Julius Reuter and Eleanor Sidgwick. These individuals represent a small cross section of Victorian values, ideologies, classes and gender, right across the century. It is not the objective of this chapter to discuss in depth their historical or biographical roles but to examine their perceptions of information.

Admittedly there are dangers of attempting to view the past through twenty-first century eyes and values. However, it is hoped that by focusing on individuals rather than on technologies, we can explore contemporary commentary in contemporary language, giving a unique exposé of the historical context under discussion.

Two things are achieved by using these individuals as the basis for the opening research chapter. The first is that the idea of *perceptions of information* can be hard to define and conceptualise and so by focusing on four individual case studies, it allows an easy introduction to the more thematic content of the research. Secondly, these individuals are familiar to many readers and so there is less need to delve into their backgrounds and origins. Scholarly works already exist which do this and therefore the chapter can immediately focus on their perceptions of information.

By examining individuals in this way, it is also possible to extract specific attitudes and relationships towards information in a way that would not have been possible if one adopted a more general initial approach. For this chapter, alongside reputed secondary sources, I consulted the archives of each of the individuals held, respectively, at Southampton University, the Florence Nightingale Museum, the Reuters Company and Newnham College, Cambridge. The sources included personal and public correspondence, transcripts of public speeches, diaries – where available, published and unpublished letters and discussion of them by their friends and contemporaries. I also

looked at their social position in Victorian society to understand their values – crucial to any understanding of Victorian perceptions.

These specific examinations made it possible to draw out more general themes, which are then examined in the remaining chapters. These areas are information etiquette and behaviour, information in popular periodicals, and information panic and awareness. These themes were chosen over others in part due to pragmatic consideration of the availability of sources. They also reflect my own approach of a more cultural and social interest in information, as opposed to the more typical approach of historical information science (or historians examining information science themes), which as explored above, tend to focus more upon communication and organisational technologies.

2.3.5 Chapter 4 – Etiquette and Behaviour, pp. 90-126.

I wanted to explore understandings of information in the more general established framework or nineteenth century etiquette, since this formed such a crucial aspect of the Victorian period from 1837. Etiquette books of any era are, in their most basic form, cultural disseminators of information and, as such, seemed an ideal source to examine for a truly socio-cultural perspective. Since etiquette evolves within culture and is dependent upon it, an examination of its literature (as well as more general notions of etiquette) allows for a holistic and historicist view of nineteenth century perceptions of cultural and social information and in so doing suggests an alternative view of the Victorian information society.

This chapter was based upon a study of seventy etiquette and conduct books published between 1791 and 1898. In addition, contemporary discussion of the notion of etiquette including satires against as well as essays in favour, and more recent scholarly discussion on the role and significance of nineteenth century etiquette. Where it has not been possible to trace authors, materials are referenced by footnotes and cited by their title and year. Full publication information is detailed in the bibliography.

The chapter argues that there was a social parallel to regulation of government and business occurring through the regulation of behavioural codes. Such behavioural standardisation of society mirrored the regulation and codification brought about by information technologies and infrastructures occurring throughout the nineteenth century in government, business, railways, time-keeping, the press and libraries which have been discussed elsewhere.⁶⁷

2.3.6 Chapter 5 – Periodical Knowledge, pp. 127-163.

This chapter is based upon a detailed micro-study of every weekly issue of two popular Victorian periodicals – *The Penny Magazine* and the *Illustrated London News* – for a period of one year, between Saturday, 14th May 1842 and Saturday, 13th May 1843; over 1,300 pages of text and images. In addition, empirical secondary studies were consulted, as well as biographies and memoirs of the key people involved in the creation and running of these two periodicals.

The chapter explicitly examines how these contemporary publications used information itself within their pages and argues that in addition to being cultural disseminators of knowledge, they also used information as a commodity and commercial marketing tool, expressed ideas and knowledge through illustration, challenged the notion of accurate knowledge and made conscious attempts to preserve knowledge as well as disseminate it.

2.3.7 Chapter 6 – Panic and Awareness, pp. 164-202.

The previous chapters explored information through the more ephemeral sources of Victorian periodical literature and etiquette guides. This chapter focuses upon an actual event – the first attempt to build a Channel Tunnel between 1880 and 1883 – and examines the controversies and panics surrounding it. The chapter explores *public* perceptions of the Tunnel to examine the ways in which information was disseminated

⁶⁷ Beniger (1986); Higgs (2004); Weller & Bawden (2005).

and utilised. The perspective is largely English, although overseas opinion is touched upon.

Source material here is explicitly public and explicitly socio-cultural. That is, it ignores engineering and technological developments or discussions, or the political development of the Tunnel. Pamphlets, published letters, newspapers, cartoons, journal essays, poems, literature, published lectures and debates form the basis of the research for this chapter.

It is argued in this chapter that by the 1880s a difference has emerged between public and private information, and that there is also a distinction in the language of the rational and scientific, versus that of the emotive and sensational. Compared to earlier in the century, we also see the emergence of a belief in public access and public right to information, and the increasing use of propaganda and public relations.

2.3.8 Chapter 7 – Bringing it all Together, pp. 203-227.

This final research chapter synthesises the conclusions from Chapters Three, Four, Five and Six to make some more general comments about perceptions and understandings of information in nineteenth century England. Whilst each chapter does stand on its own, this one uses the source material and arguments previously explored to suggest some recurring themes between them.

Perceptions of information in modernity are multiple, complex and fluid and it was never the aim of this work to offer one singular explanation of how information was thought of during the nineteenth century. It is not only between our own contemporary society and the nineteenth century that perceptions of information differ, but also often during the nineteenth century itself, since “perceptions change with experience; and perceptions are context dependent.”⁶⁸

⁶⁸ Tufte (1983), p. 56.

It is perhaps most striking that the similarities, continuities and reoccurrences between chapters occur at all, given the difference in subject matter for each chapter. Perhaps this gives them a great deal of credence *because* of their diversity.

2.3.9 Chapter 8 – Assessment, Evaluation, and Future, pp. 228-236.

Chapter Eight discusses to what extent the research questions have been answered and it demonstrates the significance of my doctoral conclusions to contemporary information scholarship. It also suggests some ways in which this scholarship and information history more generally, could be taken forward to develop upon this PhD research.

I cannot hope to be exhaustive in my research when taking on a new project of this size and scope. I can however provide an evaluation of key themes that can be followed up at a later date. Also such a study can give fresh insight into an established historical period, and an emerging field of study in its own right. Information history is a valid and powerful tool in the continuing understanding of the role information does play and has played in society. This doctoral research demonstrates the challenges it can make to accepted notions of our *own* perceptions of information. This research will have served a significant purpose if it can hone the scholarly questions asked in the future and challenge traditional views of information held both by historians and by information scientists.

Chapter 3

Individual Perceptions: nineteenth century views of information

3.1 Introduction⁶⁹

Information has become such a key part of our twenty-first century lives that there has not been much consideration of the idea that information *itself* has not always been thought of in the same way. Therefore, this chapter uses four individual case studies to explore some of the ways in which nineteenth century English men and women thought of and understood information. This is not, however, the same question as asking what *was* Victorian information, although it does tie into the contemporary Information Science debate that attempts to define information itself, as discussed above.⁷⁰ This is a discrete study; its purpose is to provide a forum to explore *some* perceptions of information during the nineteenth century and it is not intended to speak for all understandings in any way.

Nineteenth century society was not in such a self-aware 'information society' as we are today and so the contemporary discussions of the concept are much more subtle than those of our own culture (and perhaps another reason why this area has been ignored by academics of both disciplines). However, as shall be seen, contemporaries were certainly aware of the implications and effects of information in a variety of manifestations.

It is obviously impossible to know for certain how Victorian 'people' thought of information. There was little homogeneity between, or often even amongst, social classes and even if there had been, it is difficult to trace something as intangible as an attitude.

⁶⁹ A version of this chapter was first published as a paper in *Library History*. See Weller & Bawden (2006).

⁷⁰ Belkin (1978); Smith (1978, 1980); Braman (1989); Eaton & Bawden (1991); Rowley (1998); Yates-Mercer & Bawden (2002); Capurro & Hjørland (2003); Bates (2005). See also pp. 13-28.

The problem is exacerbated when you are attempting to trace attitudes about something as vague as information. However, by using contemporary dictionary definitions of the word information, it is possible to gain a sense of how it was used within Victorian language. Dictionary definitions are, after all, formed by a word's accepted use within society. To take this a step further, by examining the way a number of individuals thought of and used the concept of information in their own lives, it should be possible to gain a reflection of some of the prevalent attitudes of what information could mean to people in nineteenth century England.

The individuals discussed here are Arthur Wellesley - the Duke of Wellington, Florence Nightingale, Paul Julius Reuter, and Eleanor Sidgwick. These individuals represent a small cross section of Victorian values, ideologies, classes (although none representative of the lower classes)⁷¹ and sexes, right across the century, although it is not the objective of this chapter to discuss in depth their historical or biographical roles, but to examine their perceptions of information. Wellington is primarily known for his victories in the Napoleonic Wars (1793-1815) and his time as Prime Minister (1828-1830). Nightingale is famous for her time nursing at the Barrack Hospital in Scutari during the Crimean War (1854-1856) and for her subsequent activism in sanitation reform. Julius Reuter is the man responsible for founding the Reuters News Agency in 1851, and Eleanor Sidgwick (along with her husband, the academic and philosopher Henry Sidgwick) pioneered women's right to university education and was the founder of the all-female Newnham College, Cambridge in 1871.

Admittedly, they are selective and somewhat subjective choices, to some degree forced by practical issues of access to archive material. However, this does not mean that their experiences are any less valid than those of any other individual. Historian Asa Briggs has shown that it is possible "to trace patterns of perceptions and values through the experiences of individual people, [and that] there was no one sense of what life was like."⁷² In this particular case, the fact that they are well known individuals makes it

⁷¹ See Chapter Two, *Methodology*, p. 42. Later chapters do address some working class sources.

⁷² Briggs (1985), p. xvi.

easier to assess their biases and the impact that wider contemporary events may have had upon their attitudes towards information.

Nightingale and Reuter have previously been touched on in [information science related] literature – Nightingale for her statistical diagrams, and Reuter for his Agency’s use of telegraph technology to disseminate political and business information.⁷³ Wellington and the Sidgwicks however have hitherto remained uninteresting topics for information scientists, having no obvious connection with news, technology, or information processing tools. All four have been the topic of historical research. However, there have been no attempts in either discipline to draw the four of them together and no works that specifically endeavour to examine their attitudes towards the concept of information. It is argued here that their ways of thinking about information show some remarkable similarities, despite their differing individual social, political, and cultural beliefs. These similarities suggest some general trends towards the concept of information in nineteenth century England.

Chapter One, *Definitions*, discussed how information history should consciously seek to avoid anachronistic study of the past by applying a rigorous historical methodology. In this chapter, part of the study uses nineteenth century dictionary definitions as an entry point for grounding the research. A version of this chapter was also published in *Library History*.⁷⁴ It must be stressed that this lexicographic study was only a way to begin an engagement with contemporary understandings and takes up less than two pages in the entire thesis. However, one could argue that in choosing to look up the word ‘information’ and its derivatives (knowledge, facts, wisdom, opinion, news and so forth) there is an inevitable imposition of modern understandings by the very choice of words to look up.

⁷³ Boyd-Barrett (1978); Small (1998).

⁷⁴ Weller & Bawden (2006).

Indeed, two recent examples of less sound historical practise are Spink & Currier's attempt to look at historical examples of human information behaviour⁷⁵ and Hayes & Morris' endeavour to give a historical perspective to the leisure role of libraries.⁷⁶ In themselves these were both interesting ideas, but to a great degree they applied weak and unconvincing historical methodologies. Spink & Currier applied a methodology based upon simply searching through the biographies of individuals (often using only a single volume as evidence), looking for explicit reference of the word 'information'. For example, in their discussion of Charles Darwin's information behaviour, only *one* source was studied – his autobiography – and from this, only three brief quotations are used to support their findings. These are simply cited, with no reference to their contextual placement or wider meaning, no other supporting evidence, no analysis of the source or the quotes and no attempt to reference the alleged information behaviour within the bigger picture of Darwin's world view. The result was that much useful material was probably ignored and the references that were picked out were simplistic and abstract.⁷⁷

In Hayes & Morris' paper, they do attempt to provide context but it tends to be rather simplistic.⁷⁸ Part of the reason for this can be explained by the fact that they rely entirely on secondary material and particularly heavily on the work of Robert Snape, using him for half of their citations, from an overall bibliography of just nineteen works. As a result their claims seem unsubstantiated and generalised and the paper has a sense of not really understanding the period about which they are writing (and in some cases it is not even clear to the reader which period they are writing about).

This thesis, specifically this chapter, adopts a completely different methodology to that of Spink & Currier's and Hayes & Morris. The differences in approach demonstrate the differences between information history and library and information science dealing with historical topics.

⁷⁵ Spink & Currier (2006).

⁷⁶ Hayes & Morris (2005).

⁷⁷ Weller (2007), p. 442.

⁷⁸ Hayes & Morris (2005).

First, although the choice of words examined in the dictionaries⁷⁹ is influenced by my twenty-first century understandings, there is no arguing the point that the definitions themselves were contemporary nineteenth-century. Since dictionaries are essentially socio-cultural products, they do provide a valid entry point for understanding. Postman uses the *Encyclopedie*, launched in 1750 by Diderot for similar purposes in his study of the eighteenth century and many other scholars have also used dictionary definitions in this way.⁸⁰

Second, the dictionaries were not used in isolation. They were supported by heavy use of other contemporary material and contextualisation of wider events including some fifty primary materials and another fifty secondary texts. The *Individual Perceptions* chapter acts as an introduction to some of the themes of information in the nineteenth century, both as an intangible concept, and its tangible role as embedded in material form and uses the dictionary definitions only as a familiar starting place for the reader.

3.2 Language in the Nineteenth Century

Language is a reflection of social change. This can be seen in our own society with the development of text messaging and email language and forms that develop as new technologies are absorbed into popular culture.⁸¹ The nineteenth century was a period of immense change and to quote Briggs again, “there were such sharply contrasting varieties of experience after the advent of the steam engine... that neither the statistical nor the verbal frameworks of explanation received total assent.”⁸² In other words, the huge changes brought about by industrialisation meant that language and the meaning of

⁷⁹ The finished work concentrates on the definitions of ‘information’ but the empirical research also examined variations of this idea to ensure a broad contemporary understanding.

⁸⁰ See Postman (1999), p. 86; Bawden (2001); Banfield (2007). In her historical lexicographic study, Banfield traces the changing meanings of the word ‘sentiment’ between 1755 and 1899 by explicitly charting its dictionary definitions.

⁸¹ Birkirts (1996); Winston (1998); DiMaggio *et al* (2001); Hoeppe (2005).

⁸² Briggs (1985), p.xvi.

words, and the introduction of new ones, also changed more rapidly during the nineteenth century than they ever had before. There was a distinct move away from the relative constancy of Braudel's 'total history' of previous centuries.⁸³

It has been well documented that nineteenth century society saw key developments in transportation and communication technologies, in the dissemination of information and in organisational tools such as cataloguing, public libraries, and office bureaucracy.⁸⁴ Alongside this were social advancements including improved literacy and education – in 1845, 33% of men and 49% of women were illiterate, but by 1871 these figures had fallen to 19% for men and 26% for women.⁸⁵ Other examples include, a wider electoral franchise following the Reform Acts of 1832, 1867 and 1884, meant an increasing disposable income for many people and a more developed and independent popular press.⁸⁶ The developments that occurred over the century transformed English-speaking culture.

It seems strange that there has been so much recognition and focus upon these technological and sociological changes and yet a fundamental area – that of the linguistic change and meaning of such terminology in the nineteenth century – has often been overlooked. This is partly because of the apparent familiarity of the words, which has the effect of “lulling modern readers into imagining that this English is much like our own, when it is not.”⁸⁷ Whilst not regarding itself as an ‘information society,’ the nineteenth century did have unprecedented linguistic self-awareness, which was often associated with social status, manners, and morals.⁸⁸ These associations were reflected in the usage and semantics of words.

⁸³ Braudel 1981.

⁸⁴ Beniger (1986); Yates (1994); Headrick (2000); Agar (2003); Black (2004); Higgs (2004); Weller & Bawden (2005).

⁸⁵ Picard (2005), p. 249.

⁸⁶ Hobsbawm (1975); Cranfield (1978); Brown (1985); Briggs (1993); Wilson (2003).

⁸⁷ Bailey (1996), p.vi.

⁸⁸ Briggs (1985); Bailey (1996).

The word 'information' was not new to the nineteenth century. Its etymological origins stem from the Middle Ages, where it was derived from the Medieval Latin *informationem* and Old French *enformacion*, meaning 'formation of the mind, or teaching'⁸⁹. Samuel Johnson's groundbreaking 1755 *Dictionary of the English Language* was the first comprehensive attempt to provide some clarity of definition of English words⁹⁰. It defined the concept of what a dictionary was and can therefore be used as a benchmark of sorts. Johnson recognised that the meanings of words evolve and wrote in the *Preface* to his dictionary that "language is only the instrument of science, and words are but the signs of ideas: I wish, however, that the instrument might be less apt to decay, and that signs might be permanent, like the things which they denote."⁹¹

Johnson's *Dictionary* was considered authoritative until the appearance of another benchmark in lexicography in 1884, the *Oxford English Dictionary* (originally under the name of *A New English Dictionary* or *NED*). The two make for an interesting lexicographical comparison. The *NED* attempted to impose more rigorous, objective definitions to words, as opposed to Johnson's sometimes highly personal ones, in a reflection of the more scientific Victorian approach to philology.⁹² Therefore, by the nineteenth century, dictionary definitions for information, while based on Johnson's, were more varied:

- The act of informing or apprising.
- Intelligence given; instruction, advice.
- Charge or accusation.

⁸⁹ *Chambers Dictionary of Etymology* (1988), Chambers, p.527; *The Oxford Dictionary of Word Histories* (2002), Oxford University Press, p.272; *The Oxford English Dictionary*, 2nd Edition, Oxford University Press.

⁹⁰ The dictionary responded to a widely felt need for stability in the language. Calls and proposals for a new dictionary had been made for decades before a group of London booksellers contracted Johnson in June, 1746 to prepare the work for the sum of £1575. Volume I of the 1755 edition defined information as "1. Intelligence given; instruction, 2. Charge or accusation exhibited, 3. The act of informing or actuating".

⁹¹ Johnson (1755), p.4.

⁹² Mugglestone (2004).

- (*Law.*) An accusation or complaint made in writing to a court of competent jurisdiction, charging some person with a specific violation of some public law.
- Synonym of '*Advice*': intelligence; information.⁹³
- Intelligence given; instruction.
- Charge or accusation; act of informing or accusing.⁹⁴
- The act of informing; news or reading or instruction, or gathered in any way; a statement of facts laid before a court of justice.⁹⁵

One can see from these definitions that, just as in our contemporary society, there is no singular meaning for information. Its semantic ground can shift according to the context in which it is being used. However, there is an emphasis upon *education* and of *being informed*, as these ideas appear in each definition and across the century. The term 'intelligence' is used in the sense of both intellect and of commercial or political awareness. It is also worthy of note that the definition of 'news' for information does not appear until quite late in the century, as although 'news' existed as a word in its own right long before the 1800s, it was in this period that the two became associated with each other in everyday language.

The remainder of the chapter focuses upon the individuals discussed above and the contemporary debates and issues that surrounded them at certain key points in their lives, with reference to these dictionary definitions. With Wellington, the emphasis is on his anti-reform attitude to the 1832 Parliamentary Reform legislation, specifically with regard to how he viewed the prospect of uneducated working class men gaining the vote. For Florence Nightingale, the emphasis is on her use of information and statistics during and after the Crimean War to support sanitation reform. The section on Julius Reuter examines his policy with regard to information collection and dissemination to the

⁹³ Worcester (Eds. 1859, 1863, 1878), p. 752.

⁹⁴ Johnson (1871), VI, Pt II, p. 1257.

⁹⁵ Annadale (1894), p. 356.

newspapers; specifically, what information he thought was important or most valuable. Finally, Eleanor Sidgwick's belief in the importance of women's right to be informed and to have a university education is the subject of the final segment.

3.3 Arthur Wellesley, Duke of Wellington (1769-1852)

Historical time periods are somewhat arbitrary distinctions; countries, concepts, and people do not change suddenly at the end of one century and on the arrival of another. Consequently, many of the issues of the early 1800s can be found to have originated during the eighteenth century. The Duke of Wellington is an interesting choice to look at for Victorian perceptions of information because, in many ways, he was more aligned with the ideas and values of a previous era.⁹⁶ He grew up during the late 1700s and his worldview was dominated by one of the most significant events in modern history; the French Revolution of 1789 and the subsequent French Revolutionary Wars. He, like many of his class and period, "entertained an exaggerated dread of democracy", since to him, 'democracy' was equated with France and revolution, and he became "obsessed with the threat of mob violence."⁹⁷ He believed in the uniquely English mixture of property and freedom, in which 'property' maintained order, but laws were liberal.

In the early nineteenth century the franchise was based on the amount and value of land an individual owned and Wellington's opposition to the 1832 Reform Act can be explained not in terms of his conservatism *per se*, but because he saw it as a direct attack upon the established traditions of property.⁹⁸ During the 1831 debates on the Bill, he claimed, "a democracy has never been established in any part of the world, that it has not immediately declared war on property".⁹⁹ Wellington thus encompasses both the

⁹⁶ Gleig (1904); Guedalla (1931); Wilson (2003).

⁹⁷ Gleig (1904), p. 5; Wilson (2003), p. 117.

⁹⁸ For discussion on Wellington's life, see Gleig (1904); Guedalla (1931); and Hibbert (1999). For his military career, see Davies (1954); and for politics, see Jupp (1998); and Wilson (2003). For the wider historical context at this time, refer to Gash (1965); and, Price (1999).

⁹⁹ *Parliamentary Debates*, 4 October 1831. Quoted in Guedalla (1931), p.408.

eighteenth and nineteenth century traditions, reflecting some of the tensions of early nineteenth century England.

Two key points are argued here. First, that Wellington's attitude towards revolution and 'the mob' shaped his perception of information.¹⁰⁰ This meant it was more in line with the eighteenth century definitions and ideas of news and insider intelligence (using Johnson's *Dictionary* as a reference point), than with some of the more Victorian ideas of education and objective and rational data. In his correspondence and discussions he uses the word information with interchangeable meanings, depending on the context – either as intelligence or news. The second argument is related to this interchangeable meaning of information and concerns his relationship with the press and the character of public opinion – both of which can be seen as vehicles to inform and provide 'intelligence', but also to manipulate and exacerbate social unrest. These issues will be explored, so far as they affected Wellington, in order to gain a sense of the fluidity and flux of perceptions of information during the Reform Bill period.

The early nineteenth century was a period of intense change and domestic unrest. The end of the Napoleonic Wars in 1815 had brought economic decline that had hit the arable farmers particularly badly. The impact of the industrial revolution was beginning to be felt and population increase, new industrial towns, and economic hardship led to social unrest in the years immediately after the war. Parliamentary reform, strongly supported in the 1780s, was now associated with radicalism and the French Revolution. Parliament reacted by becoming more cautious and conservative. Fears of revolution and mob uprisings, while in hindsight posing only a limited threat, were viewed with real suspicion and alarm by contemporary elites, since they feared that what had taken place in France might follow in England.

¹⁰⁰ The word 'mob' and 'working classes' has been used in this section because this is the way Wellington and many of his contemporaries wrote and thought of the poorer classes. This does not mean to say that in any strict historical sense these groups were homogeneous or so easily defined at the time. Similarly, elites, upper classes, and such did not all hold Wellington's views on reform and revolution.

In the early 1830s, pressure for political reform increased significantly, as new industrial towns were unrepresented by the existing seat distribution, despite their new found wealth and influence. Wellington had reluctantly joined the Tory party at Lord Liverpool's request in 1819. The fifteen-year administration collapsed after Liverpool's death in 1826. Between 1827 and 1834, ministries were short and insecure with prime ministers changing seven times before finally settling down under Lord Melbourne in 1835.¹⁰¹ In 1830, William IV succeeded George IV (who had only come to the throne himself in 1820). July of that year also saw a wave of uprisings across Europe, collectively known as the "July Revolutions", prompting fears of similar uprisings in England. It was in this atmosphere of suspicion and unrest that Wellington's references to information, intelligence and news must be understood.

The Reverend George Gleig, a friend and supporter of the Duke, wrote to him in November 1831, warning of the possibility of violent attacks against him due to agitation in the country. Wellington shrugged off the concern and said he would not be prevented from travelling by such threats:

What I always do in these cases is to give information to the magistrate. It is his duty to protect all his Majesty's subjects... and even to take precautions for their protection if necessary. It is my opinion that these secret informants, who will not and probably dare not come forward with their information, do more harm than good. There is a perpetual gossip going on in the public-houses upon all sorts of plans of mischief.¹⁰²

¹⁰¹ The two key political groupings at this time were the Tories and the Whigs. They fundamentally represented the same propertied interest although the Tories were regarded as more right wing and conservative, and the Whigs increasingly associated with political and social reform. By mid century the more radical Whigs had branched off into Liberalism, with the more traditional Whigs aligning themselves with the Tories.

¹⁰² Letter from Duke of Wellington to Rev. Gleig, 7 November 1831. Quoted in Gleig (1904), pp. 101-102.

When he is writing both of his own actions and those of the informants (to which his reference of public-houses associates them with the lower classes), there is a strong suggestion of spying and of inside intelligence. Compare this to a quotation in Johnson's 1755 *Dictionary*, to define 'News' – the two are remarkably similar:

They have News-gatherers and Intelligencers distributed into their several Walks and Quarters, who bring in their respective Quotas, and make them acquainted with the Discourse and Conversation of the whole Kingdom or Common-wealth where they are employed.¹⁰³

In this same edition, information was defined as “Intelligence given; instruction... Charge or accusation exhibited... The act of informing or actuating.” Similar examples can be found in nineteenth century dictionaries, but in these, the “act of informing or accusing” is found amongst several other definitions referring to learning, law, advice and education.¹⁰⁴ In the eighteenth century there is a strong association between information and ‘news’, both providing what we would term now as inside intelligence or even surveillance. Wellington shared this understanding.

His friends and supporters wrote to him often to discuss things that they had discovered on a grass roots level during the agitation of 1831. One such correspondent wrote six pages to the Duke on how political unions in Birmingham were developing (a key area for disturbance). In his typically brief reply, Wellington thanked him for “the information [and]... your intelligence”.¹⁰⁵ Another wrote to him that he had learnt “of a plan ... for the diminution of the Army in general”. Such a reduction would have had drastic consequences because “I have heard from good authority that the Police... would soon be... destroy'd, when they know that no Army [exists] to support them... and that in fact,

¹⁰³ Originally from *The Spectator*, No. 439, 24 July 1712.

¹⁰⁴ Johnson (1755); Worcester (1859), p. 752; Annandale (1894), p.356.

¹⁰⁵ Southampton University, Hartley Library – MS 61 Wellington Papers WP1/1199/8, Letter from Wellington to F. Lloyd, 19 October 1831.

· they would not face a mob”, thereby leaving the country defenceless.¹⁰⁶ Such frantic sentiments are, in historical hindsight, unlikely to have actually occurred.¹⁰⁷ However, in terms of his perceptions of information, Wellington’s network of acquaintances, supporters, and colleagues were in a sense his “News-gatherers and Intelligencers...”, as *The Spectator* described in 1712 and Johnson defined in 1755.

Such intelligence and news were of course linked to the press, with whom Wellington enjoyed a stilted relationship. Unlike George Canning and the Whigs, he distrusted newspapers since “journalists, in his experience, existed for the propagation of falsehoods.”¹⁰⁸ There was a certain distinction between the ‘popular’ and ‘respectable’ branches of the press, the latter of which were “generally considered to be devoted to the Government, - to be its instrument, and the organ of expressing its views, vented with impunity...”¹⁰⁹ Government, Wellington included, had long used the press to leak inside information to correspondents for publication and since most reporters in the early nineteenth century made a living from their contacts, they were invariably part of the elite circle.¹¹⁰ This is somewhat different to the experience of the press and the Channel Tunnel panics of the 1880s, as discussed later.¹¹¹ John Wilson Croker, an MP, journalist, and friend of Wellington, spent the few weeks between February and April, 1827, “in an ecstasy of exclusive information (*sic*)” while the King decided who would succeed Liverpool as Prime Minister.¹¹²

¹⁰⁶ Southampton University, Hartley Library – MS 61 Wellington Papers WP1/1184/1, Letter from Colonel Sir H. F. Cook to Wellington, *n.d.* May 1831.

¹⁰⁷ Gleig (1904); Jupp (1998); Hibbert (1999).

¹⁰⁸ Guedalla (1931), p. 369.

¹⁰⁹ W.M. (1831), p. 12. There is a huge body of historical research on the press in the eighteenth and nineteenth centuries. Good starting points are Boyce *et al* (1978); Brown (1985); and, Barker (2000).

¹¹⁰ Curram (1978); Schofield (1990); Sommerville (1996); Barker (2000); Hoyer (2003).

¹¹¹ See Chapter Six, *Panic and Awareness*, pp. 164-202.

¹¹² Guedalla (1931), p. 352.

However, “the cheap press... remain[ed] in the hands of the ill-informed and mischievous”.¹¹³ It was the power of this press to distribute information to an uneducated people, which, he believed, was the cause of much of the social unrest and demands of ‘the mob’. During the second reading of the Reform Bill in October 1831, “the state of public feeling and opinion in London, as well as in the North of England, and elsewhere in the country, had been influenced by the state of affairs in France, Belgium, and other parts of Europe”, which had been reported in the press.¹¹⁴ “Every great political change infallibly disturbs the public mind, which when once unsettled is not easily quieted, but more frequently acquires a restlessness, which getting beyond human control, rapidly overturns all existing institutions”.¹¹⁵

This was perhaps a little far fetched even for 1832, but it illustrates contemporary fears of an uneducated ‘mob’ knowing too much without understanding how to use that information. For Wellington, such knowledge should reside in the aristocracy who had the education and intellect to understand it properly and govern responsibly. Fear of the working classes ‘knowing too much’ was not uncommon in the early nineteenth century and was one of the reasons behind the high stamp and paper duties, or ‘taxes on knowledge’. A tax was first imposed on British newspapers in 1712 and was gradually increased until, in 1815, it had reached 4d a copy. As few people could afford to pay this for a newspaper, the tax restricted the circulation of most of these journals to people with fairly high incomes.

Just as there was a distinction between the cheap and the respectable press, there were also distinctions between mass and respectable public opinion. This is a huge issue in itself, subtlety tied up with questions of class, social mobility and economic and political power, but it is also associated with Wellington’s attitudes towards ‘mob’ agitations and clamour, which he believed were fuelled by the press. A letter discussing the Reform Bill

¹¹³ Southampton University, Hartley Library – Wellington Pamphlet 1194/12, *A Letter to a Minister of State Respecting Taxes on Knowledge*, 2nd edition, 29 January 1831, London.

¹¹⁴ Wellington (1831), p. 4.

¹¹⁵ *Letter to a Noble Lord...* (1831), p. 8.

distinguished between ‘good’ public opinion, which has been “the source of a good thing and permanent, [and] is the work of time and reflection” and ‘bad’ public opinion, which is “an incoherent foundation of a public foundation hastily collected and cemented by passion”. The Reform Bill, it argued, was based on the latter.¹¹⁶

Mackinnon expressed similar thoughts on ‘good’ and ‘bad’ public opinion in his seminal work on the topic in 1828. He argued “public opinion is a sentiment that depends on the degree of information and wealth, which together may be styled civilization, and also with a proper religious feeling that exists in any community.”¹¹⁷ By saying this, he immediately limited ‘public opinion’ to those who had education and economic power, which in 1828 represented the new middle classes (and existing elites) and the inclusion of religious feeling, ensured that moral sensibilities were satisfied. This had the effect of excluding the working classes from holding ‘public opinion’ under his definition, as the masses were not viewed as having high moral characters (however untrue or generalised that may have actually been). He continues that “public virtue seems a necessary requisite to render public opinion of importance”, thereby justifying the irrelevance and danger of ‘bad’ public opinion through the ‘mob’, or what he termed “popular clamour, so often confounded with public opinion, yet so essentially different in every respect.”¹¹⁸ Information in this sense was strongly linked to the idea of being informed, a significant link to the eighteenth century notions of information.¹¹⁹ Once again, ignorance and a lack of education equated a violent mob, not a respectable or worthy opinion.

Wellington admitted that the working classes had access to information about events through the popular press and, as such, they could be argued as being informed. How then could their opinion be deemed ignorant? Nineteenth century views of education were, as with most aspects of society, connected with class and social status; there was a crucial difference between having information and having an education. A gentleman was

¹¹⁶ *Letter to a Noble Lord...* (1831), p. 33.

¹¹⁷ Mackinnon (1828), p. 1.

¹¹⁸ Mackinnon (1828), pp. 8, 17.

¹¹⁹ Postman (1999).

expected to have had a classical education and to have an understanding and appreciation of politics and economics. This is why so many eighteenth and nineteenth century texts, whether they are novels, newspapers, pamphlets, or speeches, use subtle references and quotations from classical works and poetry. It was accepted that someone who was well informed would not need these things explained.¹²⁰

This is discussed further in relation to Julius Reuter, but here it can be seen in terms of Wellington's belief that only men of property and education should be enfranchised, in order to avoid uninformed, ignorant "clamour" in parliament and in governing the country. In a letter to Lady Shelley in 1825, he advised her upon the necessity of her son undertaking the 'right kind' of education, as he "is coming into the world at an age at which he who knows nothing will be nothing."¹²¹ By the end of the century both education and the press were less exclusive, but, in the early decades, to be uninformed was to be unrespectable and the unrespectable could not be trusted to be enfranchised. This is something that will be discussed further in Chapters Six, *Panic and Awareness*, and Seven, *Bringing it all Together*.¹²²

Therefore, for Wellington, information was a fluid concept, tied up with politics, social class, the power of the press, public opinion and continuity and change. It was also strongly linked to eighteenth century understandings of information, which, as Postman has argued, saw information in terms of a means to an end: to inform someone, or to achieve something, rather than the end in itself.¹²³

¹²⁰ Smelser (1991); Stephens (1998); Wilson (2003), esp. pp. 279-287.

¹²¹ Shelley, Lady Frances (1825), *Diary*, edited by Edgcumbe, Vol. II, p.128. Quoted in Guedalla (1931), p. 345.

¹²² See Chapters Six, *Panic and Awareness*, pp. 164-202; and Seven, *Bringing it all Together*, pp. 203-227.

¹²³ Postman (1999).

3.4 Miss Florence Nightingale (1820-1910)

Florence Nightingale came from a wealthy family with high political connections. She was educated at home and decided upon nursing as a career despite reservations from her family over its suitability for a lady of her social class – women who went into nursing were not considered ‘respectable’ but associated with drinking and vulgarity. During the Crimean War (1854-1856) she oversaw the introduction of female nurses into military hospitals, and improved levels of health by establishing basic sanitation reforms. On her return to London in 1856, she fell ill, something that was to remain with her for the rest of her life, but this did not prevent her becoming heavily involved with setting up schools for nurses and in campaigning for sanitation reform and awareness.

She also became a key Victorian statistician, notably becoming the first elected female member of the esteemed *Statistical Society of London* in 1858.¹²⁴ Her use of graphic and tabled statistical data to educate, inform and persuade Government and the public of the importance of hygiene and sanitation could be seen as a way of demonstrating “the act of informing... intelligence... knowledge derived from ... or gathered in any way; a statement of facts...”¹²⁵ It is not the intention here to attempt any specific analysis of Nightingale’s actual statistics, or to explore her role during the Crimea or afterwards (on which there is already a large body of research), but rather to use this section to explore her utilisation of, and belief in, this kind of statistical information.¹²⁶

For some of the individuals discussed in this chapter, information was perceived as something flexible and subjective; in contrast, it is proposed here that, for Nightingale, information was objective, rational, fixed and scientific. This attitude is very much in line with her character and personal scientific and religious beliefs. It is also perhaps the best

¹²⁴ Nightingale’s life has been well documented. The best examples are Small (1998b); Coates (2000); Montgomery (2000).

¹²⁵ One of the definitions of information, in Annandale (1894), p.356.

¹²⁶ More specific research on her role as a statistician includes Cohen (1984); Small (1998a, 1998b); and Magnello (2001).

example, of the four here, of the nineteenth century 'spirit of the Age' fascination with science and facts. It will be argued that statistics were, for her, significant but dispassionate pieces of evidence to be used in solving the social questions of the day. For Nightingale, the issues (of mortality and hygiene) were emotive, but the information itself was not. This provides a contrast to Eleanor Sidgwick, for whom information and education were highly personal matters.¹²⁷

In March 1854 Britain, France and Turkey declared war on Russia, officially beginning the Crimean War.¹²⁸ The Crimean War was fundamentally a battle to preserve the balance of power in Eastern Europe. It marked the final collapse of the Congress System of power balance that had existed since the end of the Napoleonic Wars in 1815. It was also one of the first wars to be covered by the popular press. Nightingale arrived at the barrack hospital in Scutari in November 1854, at the request of her friend and the then Minister for War, Stanley Herbert.

Conditions in the barrack hospitals were appalling and she wrote regular letters to the Government and *The Times* in attempts to increase awareness. Nightingale is the only one of the four individuals who expressed such a strong connection between information and God, which is worth noting for the very personal slant it gives to her perspectives and views. Nightingale had heard God call her to his service in 1837 when she was just seventeen. After taking up nursing, she interwove her theology with her ideas on probability and social behaviour. She believed that the patterns of behaviour identified by statistics were expressions of the "laws of God" left by the Creator in order to be discovered and acted upon.¹²⁹ For her, "to understand God's thoughts, we must study statistics for these are the measure of His purpose."¹³⁰ Religious belief is not necessarily emotional, but it is devotional. These natural laws combined science and religion in a

¹²⁷ See Chapter Three, *Individual Perceptions*, pp. 79-87.

¹²⁸ On the war itself see Hobsbawm (1975), pp. 69-81; Wilson (2003), pp. 175-200.

¹²⁹ (Nightingale, 1859, pp.7-9; Small, 1998b, pp. 10, 188-189).

¹³⁰ Quoted in Pearson (1924), p. 250.

example, of the four here, of the nineteenth century ‘spirit of the Age’ fascination with science and facts. It will be argued that statistics were, for her, significant but dispassionate pieces of evidence to be used in solving the social questions of the day. For Nightingale, the issues (of mortality and hygiene) were emotive, but the information itself was not. This provides a contrast to Eleanor Sidgwick, for whom information and education were highly personal matters.¹²⁷

In March 1854 Britain, France and Turkey declared war on Russia, officially beginning the Crimean War.¹²⁸ The Crimean War was fundamentally a battle to preserve the balance of power in Eastern Europe. It marked the final collapse of the Congress System of power balance that had existed since the end of the Napoleonic Wars in 1815. It was also one of the first wars to be covered by the popular press. Nightingale arrived at the barrack hospital in Scutari in November 1854, at the request of her friend and the then Minister for War, Stanley Herbert.

Conditions in the barrack hospitals were appalling and she wrote regular letters to the Government and *The Times* in attempts to increase awareness. Nightingale is the only one of the four individuals who expressed such a strong connection between information and God, which is worth noting for the very personal slant it gives to her perspectives and views. Nightingale had heard God call her to his service in 1837 when she was just seventeen. After taking up nursing, she interwove her theology with her ideas on probability and social behaviour. She believed that the patterns of behaviour identified by statistics were expressions of the “laws of God” left by the Creator in order to be discovered and acted upon.¹²⁹ For her, “to understand God’s thoughts, we must study statistics for these are the measure of His purpose.”¹³⁰ Religious belief is not necessarily emotional, but it is devotional. These natural laws combined science and religion in a

¹²⁷ See Chapter Three, *Individual Perceptions*, pp. 79-87.

¹²⁸ On the war itself see Hobsbawm (1975), pp. 69-81; Wilson (2003), pp. 175-200.

¹²⁹ (Nightingale, 1859, pp.7-9; Small, 1998b, pp. 10, 188-189).

¹³⁰ Quoted in Pearson (1924), p. 250.

way that allowed her to avoid the crisis of faith many Victorians faced following the publication of Darwin's evolutionary theory in 1859.¹³¹

The nineteenth century was the era when science and statistics really came into the fore. Various statistical societies emerged in the 1830s as a response to the Condition of England Question of how to explain and resolve poverty and poor sanitation. Census returns from 1801 onwards, plus legislation to record all births, deaths and marriages in 1837, added to the necessity of the government's statistical bodies.¹³² Even the Reform Bill of 1831 was described as "an experiment in legislation founded on a numerical theory."¹³³ Nightingale grew up among these new social debates and expressed an interest in measurements and statistics from an early age, even methodically marking her travel guide for Egypt while she was abroad between 1849 and 1850 with the distances of all the places she would be travelling to during her visit.¹³⁴

The high Victorian era was one of "facts", best summed up by the educational philosophy of Mr. Gradgrind in *Hard Times*, who declared that "In this life, we want nothing but Facts, sir; nothing but Facts!"¹³⁵ The novel was intended as a satire on the philosophy of utilitarianism and its use of statistics, but it also commented on a society dehumanised by the regularities imposed by statisticians. In September 1882, a future student of Newnham College, Cambridge, Winnie Seeborn, wrote that "What I think about knowledge (or rather about *mine*) is this: it is not so much knowledge I want as 'thought'

¹³¹ This is discussed in Houghton (1963); Desmond & Moore (1994); and, Browne (2002).

¹³² Porter (1851); Eastwood (1989); Agar (2003), pp. 78-120; Frankel (2006).

¹³³ W.M. (1831), p. 1.

¹³⁴ The guide is *Hand-book for Travellers in Egypt*, by Sir Gardner Wilkinson FRS, published by John Murray, Albemarle Street, London, 1847. It is inscribed inside "Florence Nightingale Egypt 1849-1850". The lists of places, all along the river Nile, are from Alexandria to Cataract II and written in pencil by Nightingale. The distances are listed for each place and then as total figures. [Florence Nightingale Museum Collection](#) - 1.0111.

¹³⁵ Dickens (1854), p. 1.

and 'grasp'. It is no use knowing a lot of facts and truths if you do not know their relation to one another and to you."¹³⁶

The statistics of Florence Nightingale were an attempt to provide exactly that; she wanted to make people understand (and solve) the appalling sanitary conditions, the high mortality rates and the unnecessary death of soldiers during the Crimea, through the use of comparisons to civilian mortality rates and objective facts. If these facts were presented graphically rather than as tables then all the better as she was one of the earliest to realize what is now taken for granted, that "diagrams are of great utility for illustrating certain questions of vital statistics by conveying ideas on the subject through the eye, which cannot be so readily grasped when contained in figures."¹³⁷

As an interesting aside, Charles Dickens commented later in life that the novel had been meant to satirize those "addled heads" who would use the average temperature in the Crimea "as a reason for clothing a soldier in nankeens [silks] on a night when he would be frozen to death in fur."¹³⁸ It is not believed that Dickens and Nightingale ever met and since the novel was published in 1854, just before the Crimea, it would seem unlikely that she had any direct influence over the subject matter. However, his reference to the Crimea would suggest Dickens felt the statistical evidence used to illustrate such human suffering did represent the dehumanising effect he depicted in *Hard Times*. Other contemporary figures agreed that such statistical analyses were objectionable on a sociological level, particularly John Stuart Mill who wrote at length on the subject.

Nightingale published several works on her return from the Crimea, based on the evidence she had gathered there, the most significant of which were *Mortality of the British Army* (1858), *A contribution to the Sanitary History of the British Army* (1859); and *Notes on Matters Affecting the health, efficiency, and hospital administration of the British Army* (1858) (see fig. 1, p. 69). Nightingale was not the first to use statistical

¹³⁶ Glendinning (1969), p. 32.

¹³⁷ Nightingale (1858), p. 1.

¹³⁸ Quoted in Cohen (1984), p. 133.

methods for presenting information; over fifty years earlier, William Playfair had created an early 'pie chart' of the levels of tax certain countries paid.¹³⁹ However, as Small argues, Nightingale's information was unique in that she used her statistics to argue a case and to persuade people of the need for change. Her publications, as opposed to what had gone before, "were more topical and conveyed a call to recent action – they were prescriptive rather than descriptive."¹⁴⁰

Edwin Chadwick had tried to do a similar thing with his Condition of England reports in the 1830s and 1840s using text and statistical tables. Although the two of them were to combine forces after her return from the Crimea, Chadwick differed from Nightingale in his attitude that sanitation reform was an issue for the engineers who built the sewers and lawyers who legislated against unhygienic conditions, rather than for medical practitioners. At the time, "his plan to force people to be clean by law was seen as both dictatorial and impractical" and in 1852 the Prime Minister Lord Derby stated "that it would be impossible ever to enforce cleanliness by legislation."¹⁴¹ Around the same time, *The Times* commented that, "we prefer to take our chances with cholera and the rest, than be bullied into health".¹⁴² This was the public and government that Nightingale was trying to educate and persuade with her statistics.

She attempted to do so by making the reports as scientific and objective as possible. Her friend and later colleague, Dr. William Farr, was the Superintendent of the Statistical Department of the Registrar-General's Office, which made him responsible for writing explanations to accompany the summarised statistics produced in the Office.¹⁴³ He heavily influenced Nightingale's publications and offered advice on the content of her

¹³⁹ Playfair (1801).

¹⁴⁰ Small (1998a), p. 1.

¹⁴¹ Small (1998a), pp. 38, 39.

¹⁴² Quoted in Small (1998b) p. 39.

¹⁴³ "In 1864 Farr was the first to publish work containing material calculated and printed by a machine, Scheutze's Difference Engine. Its design was based on Charles Babbage's earlier Difference Engine (1815), forerunner of the computer.... Farr used it to calculate life tables based on 6,470,720 deaths in England between 1841 and 1851" – Dunn (2002).

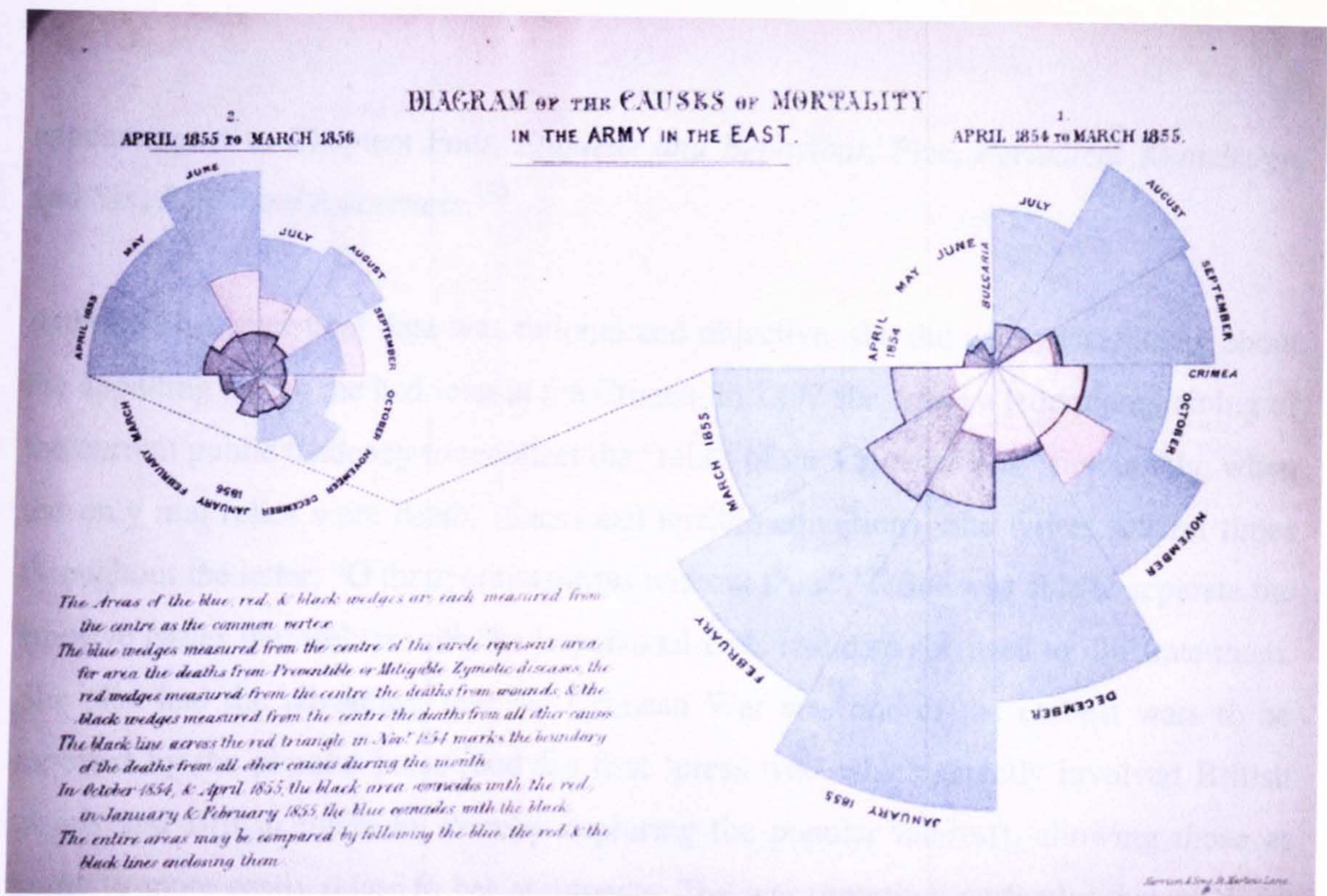


Figure 1: Diagram of the Causes of Mortality in the Army in the East. Taken from "Notes on Matters Affecting the Health, Efficiency, and Hospital Administration of the British Army," Florence Nightingale (1858).

The accompanying text reads:

"The areas of the blue, red & black wedges are each measured from the centre as the common vertex. The blue wedges measured from the centre of the circle represent area for area the deaths from Preventable or Mitigable Zymotic diseases, the red wedges measured from the centre the deaths from wounds, & the black wedges measured from the centre the deaths from all other causes. The black line across the red triangle in Nov. 1854 marks the boundary of the deaths from all other causes during the month. In October 1854, & April 1855, the black area coincides with the red, in January & February 1855, the blue coincides with the black. The entire areas may be compared by following the blue, the red, & the black lines enclosing them."

Reproduced courtesy of the Florence Nightingale Museum Trust, London.

reports and diagrams, including the suggestion that the tables could be improved "by omitting all lines containing no facts".¹⁴⁴ This rationality of language is something that

¹⁴⁴ London Metropolitan Archives, Florence Nightingale Collection – HOI/ST/NC/15/11/002a, Letter from William Farr to Florence Nightingale, 30 July 1859.

appears again in Chapters Four, *Etiquette and Behaviour*, Five, *Periodical Knowledge*, and Six, *Panic and Awareness*.¹⁴⁵

Although her statistical data was rational and objective, she did care passionately about the appalling things she had seen in the Crimea. In 1897 she wrote a letter complaining of the current public tendency to recollect the “relics of the Crimean War” favourably, when the only real relics were death, illness and terrible conditions. She writes several times throughout the letter, “O these enthusiasms without facts”.¹⁴⁶ She was able to separate the emotive issues themselves with the impersonal facts and data she used to illustrate them. She also had the advantage that the Crimean War was one of the earliest wars to be reported by the popular press (and the first ‘press war’ which directly involved British troops and British interests, thereby capturing the popular interest), allowing those at home to more easily relate to her arguments. The war reporting, particular that of W.H. Russell of *The Times*, “excited the popular interest and the popular sympathy with the army...

While in this mood the report of the Royal Commission on the Health of the Army was laid before Parliament. It was eagerly taken up by the Press. It was extracted, abridged, analyzed, commented on, and excited a marked interest among all classes of society.¹⁴⁷

Herbert continued that this testimony and the Nightingale publications that followed it, made more of an impact than previous reports because the facts had a purpose. Earlier statistics had been “content to rest when [they] got what [they] were always asking for, information, and it remained useless because it was unused.”¹⁴⁸ The sentiment is the same

¹⁴⁵ See Chapters Four, *Etiquette and Behaviour*, pp.90-126; Five, *Periodical Knowledge*, pp. 127-163; and Six, *Panic and Awareness*, pp. 164-202.

¹⁴⁶ London Metropolitan Archives, Florence Nightingale Collection HI/ST/NC3/SU/169 - Letter from Florence Nightingale to Maude Verney, 23 February 1897.

¹⁴⁷ Herbert (1859), p. 7.

¹⁴⁸ Herbert (1859), p. 7.

as the one Winnie Seebohm would express in 1882. For facts to be useful, they had to have a purpose. Information for information's sake was not enough.

For Nightingale, information meant rationality, statistics with a function. Although this section began with a nineteenth century definition of information, in Nightingale's case, a contemporary definition for 'facts' could be more appropriate:

“[Lat. *factum*.] Effect produced; action; deed: (... a matter of *fact* being opposed to one of law; *facts* being opposed to fancies, fictions, or theories, and the like)”.¹⁴⁹

Pure numerical data was meaningless; in order to present the best possible argument, statistics should be objective, rational and informative. Information was a rational way of communicating something irrational. Nightingale's concept of information was fixed and scientific and in this respect she differs to the other three individuals who are discussed in this chapter. Nightingale too offers an example of the dichotomy between a very private, in her case religious, perception of information, alongside a very public understanding and use of the same information. This dichotomy is one that will be returned to in Chapter Seven, *Bringing it all Together*.¹⁵⁰

3.5 Mr. Paul Julius Reuter (1816-1899)

Julius Reuter was born in Germany and after spending his early life working in Europe, moved to England in 1845 where, except for a brief interlude during the revolutions of 1848, he remained for the rest of his life. In 1851 he established the small three-man Reuters Agency, to exploit the new technologies of telegraphy communications. The company is still going today with revenues of £2.9 billion in 2004.¹⁵¹ Unfortunately, there

¹⁴⁹ Latham (1871), Vol. I, Part II, p. 905.

¹⁵⁰ See Chapter Seven, *Bringing it all Together*, pp. 209-213.

¹⁵¹ The company is due to merge with its rival Thomson but the Reuters name is so famous it is going to be kept.

is little surviving primary material on Reuter himself, as most of his personal and business correspondence was burnt by his granddaughter during the First World War, in an attempt to distance herself from her German Jewish origins.¹⁵² However, during his lifetime, and especially while he was Managing Director (until May 1878), Reuter's influence over the company was absolute. His contract following the company's registration as a limited one in 1876, gave him "the sole and entire management of the business" and stated that "no other director or shareholder shall be entitled to interfere."¹⁵³ Therefore, the strategy of the company during the nineteenth century does, to a great extent, reflect the values of Julius Reuter.

This is obviously not ideal, since there is no way of knowing which potential documents are missing, but by using alternative contemporary sources about the man and the company and relying on secondary scholarship, it is possible to gather some ideas on his perceptions of information.¹⁵⁴ Most existing work on Reuter (both historical and information science) tends to focus upon his utilisation of technology to organise and disseminate news, and makes the assumption that 'news' and information are synonymous – both in the nineteenth century and today, which, as is illustrated by this work, was not necessarily the case.¹⁵⁵ There is much that could be said about the infrastructural aspects of the company, but it is the objective of this segment to look at the more sociological features and examine his perceptions of the actual information with which he was dealing.

It has been recognised that Reuter thought of news as the commodity of the day.¹⁵⁶ In taking that idea one step further, from the technicalities of how he organised, collected and distributed news, it is proposed here that information itself interested him only so far

¹⁵² Thanks to John Entwisle, Archivist at the Reuters Group, London for this detail.

¹⁵³ Quoted in Read (1992), p.48.

¹⁵⁴ Due to the absence of material from these early years, there are only two respected histories of the company, which are Storey (1969); and, Read (1992).

¹⁵⁵ Storey (1969); Boyd-Barrett (1978); Brown (1985); Read (1992).

¹⁵⁶ (Storey, 1969, p. v.; Read, 1992, p. 5).

as it was saleable and commercially viable; the actual content did not matter to him, as long as it mattered to those who bought his telegram service. It is also significant that this was a perception of information in the public sphere, something we saw with Nightingale and which will be discussed more fully in Chapter Seven, *Bringing it all Together*.¹⁵⁷

He was one of the most successful early capitalist entrepreneurs, providing “intelligence” or news to the newspapers - at a price - and followed the trends for information in the country. Therefore, the second point argued here is that it was his customers, the mass market for news, which shaped his own perception of information. He was objective about his work, although in a different way to Nightingale – he could enjoy the stories as interesting and dynamic (he was himself part of the mass market for news after all), while still able to rationalise that for information to be worth anything to him, it had to be of value to someone else. In one contract between the news agencies Reuters, Havas (France) and Wolff (Germany) from 1870, there is an agreement to pay £200 per month for telegraphed information, which in today’s money works out at around £15,000 per month¹⁵⁸ – a serious amount to pay for information even in our information obsessed contemporary society.

This has interesting resonance with recent debates in the information science community over the value and pricing of knowledge in businesses, and suggests that a trend of recognising and valuing information within commerce was being established by the mid-nineteenth century.¹⁵⁹

Cooke & Wheatstone patented their version of the electric telegraph in 1837 and it was first used on the railways as a communication device. However, the wider public first became aware of the use of the telegraph not because of its role on the railways, but

¹⁵⁷ See Chapter Seven, *Bringing it all Together*, pp. 203-227.

¹⁵⁸ [Reuters Group Archive LN248/ 1/880244](#) – Rules of Common Action. Updated figure calculated by the Economic History Service EH.net.

¹⁵⁹ For discussion on the value of knowledge in this context refer to Eaton & Bawden (1991); Bud-Frierman (1994); and, Black (2004).

rather because of its employment in more social situations, such as its use to convey the news to London that Queen Victoria had given birth to her second son in August 1844, or the capture of murderer John Tawell in January 1844 as he tried to escape via train but was caught by police use of the telegraph to contact the station ahead.¹⁶⁰ In fact, *The Times* went so far as to call the telegraph “the cords that hung John Tawell,”¹⁶¹ so significant was its public impact.

By the 1850s, the technology had been diffused enough to allow Reuter to adapt its practicality for other communication purposes. The popular press had been expanding at the same time and in 1855 the stamp duty on newspapers was abolished, allowing more people access to this kind of information. By mid-century the press was seen as a key factor in the formation and articulation of public opinion and was also regarded as having a constitutional role in defending civil liberties.¹⁶² Cheaper train travel had allowed the population to be more mobile and the British Empire had huge political influence around the world. By the establishment of the Reuters Agency in 1851, there was, therefore, a new and untapped potential market for information. His market determined Reuter’s perceptions of information and “his market was the minds of men.”¹⁶³ To be successful, he had to be aware of what was commercially viable.

The Reuters Group in 2007 covers all kinds of information and news, but in the 1850s its coverage was much more limited. An examination of what types of stories were included and when they first began appearing, suggests that Reuter was aware of the topics on which the public audience wanted more information. In his years before the news agency, Reuter had used pigeons to send details of closing prices of the Brussels bourse, due to demand from the financial market. After his establishment in London, one of the earliest arrangements he made was with the London Stock Exchange, to provide the market

¹⁶⁰ Hall & Preston (1998); Standage (1998), p. 51; Weller & Bawden (2005).

¹⁶¹ *The Times*, 3rd January 1845.

¹⁶² Barker (2000).

¹⁶³ Storey (1969), p. v.

prices twice a day in London and Paris, later extending to Amsterdam, Berlin, Vienna, and Athens.¹⁶⁴

The news information side of the business came after the financial one. Before the mid-1850s, the market for political news was more limited than the long established financial trade. When Reuter was first establishing himself in 1854, the total circulation of the daily papers in the United Kingdom were fewer than 100,000 copies a day, half that sum accounted for by *The Times* alone. By 1870, the *Daily News* alone was reaching 150,000 daily.¹⁶⁵

During the relatively unsophisticated market of the 1850s, the news stories of the Agency largely covered political and overseas information. A decade later however, new types of information were beginning to be integrated, including the first cricket story in April 1862, and the first 'culture' item in July of the same year, reporting that Victor Hugo's *Les Misérables* was selling well in Portugal.¹⁶⁶ This was reflective of the development of sport and the arts in popular tastes, aided by increased disposal income and leisure time by the second half of the century.¹⁶⁷ In 1848, the 'year of the revolutions' across Europe, Reuter returned to Germany and exploited the demand for sensitive information by publishing political pamphlets, then moved to Paris (the centre of revolutionary influence) to work in the Havas News Agency.¹⁶⁸ Read recognises that Reuter was most likely acting more from a commercial motive than a political one, as taxes on newspapers had been abolished in France and Belgium in 1848, and he returned to financial information once the 'revolution' was over.

¹⁶⁴ Reuters Group Archive LN695/1/962632 – Letter from Paul Julius Reuter to N. M. Rothschild, 27 April 1850.

¹⁶⁵ Storey (1969), pp. 10-15, 18.

¹⁶⁶ Reuters Group Archive - Telegraph Books, Vol. 1, 1854-1881.

¹⁶⁷ Ohmann (1996); Wilson (2003), p.409.

¹⁶⁸ Read (1992), pp. 8-9.

However, it was not just ‘news’ he was being opportunistic with; it was also the *subject* of the information itself. The information he provided throughout his career was what people would pay for; he went where the money was. He was a businessman through and through and this was fundamental in how he perceived information.

This commercial importance meant that Reuters was one of the first companies to make efforts to copyright news. In an edition of the *Reuter Service Bulletin*, Reuters representatives discuss “copyright in telegraphic news”. Legislation from the Union of South Africa is praised, where “the *substance*, as well as the *form*, of a message is protected.... The man who steals your news is as much a thief as the man who steals your purse”.¹⁶⁹ The idea of information as a commodity could not have been more explicitly stated.

By the end of the century, Reuters Company information was independently recognised enough to provide what Bailey has termed the “spontaneous creation”¹⁷⁰ of the verb ‘maffick’, meaning to riotously rejoice. During a minor incident during the Boer War on Thursday May 17th 1900, British forces relieved the town of Mafeking in South Africa. The news was telegraphed back to London by Reuters, causing crowds to happily rejoice on the Saturday. The following Monday, 21st May, the *Pall Mall Gazette* coined the term “mafficking” to describe these public rejoicings. Indeed the *Oxford English Dictionary* gives the origin of the word as the *Pall Mall Gazette*¹⁷¹, but the original Reuters’ reports show that this was based on information telegraphed two days earlier.¹⁷²

¹⁶⁹ Reuters Group Archive LN1/1/860412 - cutting from the *Reuter Service Bulletin*, No. 4, January 1918, p.20, inside *The Epoch, a booklet explaining news copyright, 1890-1911*.

¹⁷⁰ Bailey (2000), p. 18.

¹⁷¹ “1900 *Pall Mall G.* 21 May 2/2 We trust Cape Town...will ‘maffick’ today, if we may coin a word, as we at home did on Friday and Saturday,” *Oxford English Dictionary* (2001), p. 180.

The full definition is as follows:

“maffick *v.* [Back-formation from *mafficking* (i.e. the proper name for ‘Mafeking treated jocularly as a gerund dof pres. pple.)] *intr.* Originally used to designate the behaviour of the crowds (in London and other towns) that celebrated with uproarious rejoicings the relief of the British garrison besieged in Mafeking (17 May 1900). Hence *gen.* to indulge in extravagant demonstrations of exultation of occasions

Interestingly, in the *Rules of Common Action* agreed by Reuters, Havas (the main French news agency), and Wolff (the German agency) in 1870, the document does not use the terms information or 'news' at all, but instead refers to telegraphic *intelligence*. The implications and connections between the semantics of these words have been discussed above, but the fact that an official business agreement as late as 1870 was referring to a commodity as 'intelligence', supports the emphasis on the content of the information being the saleable factor, not just the speed or format in which it was delivered as is often suggested.¹⁷³

However, his audience was diverse and the topics of information they demanded were not homogeneous. Readers of his telegrams "were taken to be men (not women) of middle class liberal opinions" and this reflected the subject matter of information that was covered.¹⁷⁴ The nineteenth century concept of a gentleman's education has been referred to in relation to the 1832 Reform Act agitation and it was still an important aspect of society by the last quarter of the century. Assumptions about the audiences' knowledge of names, places and classical references can be found in the Reuters' telegrams as late as 1876.¹⁷⁵

Part of the Reuters company uniqueness was that they reported only the information, and did not provide any analysis or commentary. This was in part due to expediency of short messages when telegraphy was still expensive and in part allowed the newspapers to discuss the information according to their own allegiances and sensibilities. By the end of

of national rejoicing. Hence 'mafficking *vbl. ab. and ppl. a.*; 'mafficker, one who 'mafficks'; maffick *sb.*, an act of 'mafficking'."

¹⁷² Reuters Group Archive LN1 860313; and, LNI 860314. See also Jeans (1928), p. 414.

¹⁷³ See above section of Duke of Wellington for discussion of 'intelligence', 'news' and information; Reuters Group Archive LN248/1/880244 – *Rules of Common Action, 1870: Havas, Reuters and Wolff (Continental Telegraph Companie)*.

¹⁷⁴ Read (1992), p. 30.

¹⁷⁵ Reuters Group Archive - Telegraph Books, Vol. 1. 1854-1881.

the century, journalistic discussion of this sort was becoming more common.¹⁷⁶ Sometimes newspapers complained that Reuter sent them too much irrelevant information.¹⁷⁷ Competitor news agencies that tried to focus on alternative information and did not fit the market demand collapsed within just a few years. The Dalziel Agency was established in 1890 and focused its coverage on American news – an area in which Reuters’ coverage was not so strong. Despite some early success, the English public proved more interested in their own Empire and political affairs and by 1896 the Agency had all but collapsed.¹⁷⁸

As the state became more democratic, with the franchise expanding through the Parliamentary Reform Acts of 1832, 1867 and 1884 and education reform in 1870, the political ideology of Liberalism and state intervention became more dominant over older traditions of property. This in turn, led to *The Times* to state that the “first duty of the press is to obtain the earliest and most correct intelligence of the events of the time, and [disclose] them to make them the common property of the people”.¹⁷⁹ There was increased emphasis for Reuter therefore to provide information that would educate and inform people, to allow them to be responsible and moral citizens – a notion which will also be discussed in Chapter Four, *Etiquette and Behaviour*.¹⁸⁰ By 1871, the press was being described as unable to “fail to promote morality, as well as spread intelligence, among all classes of the community.”¹⁸¹ Things had come a long way since the fears that such access to information would provoke revolution in the 1830s and, as will be shown in Chapter Six, *Panic and Awareness*, information and the role of the public, the press and the government, would continue to evolve.¹⁸²

¹⁷⁶ Hampton (1999); Matheson (2000).

¹⁷⁷ Letter from Mowbray Morris to Julius Reuter, 21 October 1859; Letter from Mowbray Morris to Julius Reuter, 24 November 1862. Quoted in Read (1992), p. 25; and, Storey (1969), p. 30. Morris was editor of *The Times* and was famously dismissive of Reuter’s Agency.

¹⁷⁸ Boyd-Barrett (1978), p. 195.

¹⁷⁹ *The Times*, 6th February, 1852, p. 4.

¹⁸⁰ See Chapter Four, *Etiquette and Behaviour*, pp. 90-126.

¹⁸¹ Grant (1871), p. 322.

¹⁸² See Chapter Six, *Panic and Awareness*, pp. 164-202.

In some ways, Reuter's nineteenth century perception of information is similar to the dominant material twenty-first century view; that it was something intangible to be bought and sold, packaged and processed and the only information that existed was that for which people would pay. Perhaps it is this ideology that has enabled the Reuters Group to survive for 150 years and flourish within the information society. It also suggests a fundamental continuity of certain attitudes to information and implies that the qualities of the so-called information age are perhaps not as new and unique as is often assumed.

3.6 Mrs. Eleanor Sidgwick (1846-1936)

Eleanor Mildred Balfour was the sister of Arthur Balfour, the future British Prime Minister and in 1876 married Henry Sidgwick, an academic and philosopher. Both Sidgwick and her husband were advocates of women's rights to university education and founded the all-female Newnham College, Cambridge in 1871. Dictionary definitions of information in the nineteenth century include concepts of education and being educated.¹⁸³ By focusing on some of the debates over women's right to university education in the last quarter of the century and specifically Sidgwick's role within them, it is possible to tease out some of the Victorian perceptions regarding such a concept of information.¹⁸⁴

This section will argue three main points. First, that there was a fundamental difference between male and female education and the type of information they wanted and were given and that this was a reflection of contemporary social context. The social acceptance

¹⁸³ In the 1871 edition of *Johnson's Dictionary of the English Language*, and the 1859, 1863, and 1878 editions of Worcester's *A Dictionary of the English Language*, definitions of information included "intelligence given; instruction" (p. 1257; p. 752).

¹⁸⁴ The focus is on university education because elementary education for women was fairly accepted by the 1870s. University education was regarded as different because it had traditionally been a male preserve and privilege. Oxford and Cambridge dominated as Victorian educational institutions.

and etiquette of information appear as key themes. Second, that as a defence to the arguments proposed as to why women should not be recognized by the University, or be taught on equal terms as men at this level, techniques were employed to gather personal and statistical information on the women at Newnham, by the women at Newnham. This was related to the wider eugenics debate of this period, which had been filtered down to a cultural level. Third, that while individuals could be moral crusaders for women's rights, these beliefs could be put to one side when challenged by traditional and accepted social conduct and manners. To nineteenth century society, recognised social and cultural patterns of behaviour, particularly within the upper and middle classes concerned with this debate, dominated over more radical interpretations of information access or dissemination.

Newnham was formed through the amalgamation of the Newnham Hall Company, which had been created to provide a hall of residence for women attending lectures and the *Association for Promoting the Higher Education for Women in Cambridge* (first formed in October 1873). The new body was incorporated as the Newnham College Association, of which Sidgwick was Principal between 1892 and 1910, although it was not granted full membership of the University until as late as 1948¹⁸⁵. In the early days of the College, women were not eligible to sit Tripos examinations, although they were allowed to sit the paper separately and be informally marked, if the lecturer was willing. They were allowed to attend lectures, again, at the lecturer's discretion, from 1881. Degrees were not conferred until 1921. Before that, women were issued with a certificate and were not permitted to use the title of BA or MA.

One of the main reasons for this segregation of men and women was that established social norms regarded women as at best different and at worst inferior, to men. In the Victorian era women had few legal rights. They could not vote until 1918; until the Women's Marriage Acts of 1870 and 1882, women surrendered all money and property to their husband when they married; and even by the end of the century divorce was still

¹⁸⁵ The history of the University and the College has been well documented and good starting points can be found in Leedham-Green (1996); Shils & Blacer (1996); and, Sutherland (2006), esp. chapters 5-8.

frowned on by the older generation, although it had become more acceptable following the Matrimonial Causes Act of 1884.

Alongside this were the further subtleties of class distinction: 'ladies' and 'women' were not considered the same. A university education was out of the question for anyone who was not a lady, and yet "a lady was not supposed to have any desires or functions outside her home duties."¹⁸⁶ Enquiring minds were often stifled by such conventions, yet women of a higher social status used these same arguments to justify their elevation from women of a poorer social background. The subtleties of such social distinctions are complex and there is not the space to go into detail here. What is important is that when talking about university education for women, neither the groups in favour, nor those against the idea, were homogeneous or fixed, but rather that "shifting and temporary alliances cut across all kinds of personal and academic relationships."¹⁸⁷

The distinctions between men and women (that is, ladies), was reinforced by the scientific debates on social Darwinism and eugenics.¹⁸⁸ Even the recognition that the situation for women may be changing was described in scientific and Darwinian terms:

It is clear that women are in a time of transition... As environment changes, the organism adapts itself or perishes... How woman's environment has changed, research and observation tell us; how the change must be met, it is the work of deduction and experiment to show.¹⁸⁹

These arguments were held up as examples of why women could not and should not, be admitted to Cambridge. The biological, natural order ideology was used to suggest that women's bodies and minds were too weak, too frail, to cope with a university education,

¹⁸⁶ Glendinning (1969), p. 6.

¹⁸⁷ Beard (1996), p. 23.

¹⁸⁸ Beard (1996); Richardson (2003).

¹⁸⁹ *Female poaching on male preserves* (1888). The tone and title of the essay suggest that the author was most likely male.

and that such study was 'unfeminine' and would threaten traditional domestic roles. They were designed for domestic roles and domestic information – how to cook and clean and manage household accounts – not the intellectual pursuits of economics, mathematics, or philosophy. A male critic argued in 1897, around the time of the second (unsuccessful) attempt to secure for women the titles of degrees, that women's and men's intelligence, while equal, was different and therefore "it follows as a natural, if not a necessary, corollary that the lines of development and the modes of education should be different". His adaptation of the 'natural order' debate continued by suggesting that women should not be admitted to Cambridge, but should instead start up their own "University for women, and for women only", which would provide information and education more suitable for their biological needs.¹⁹⁰

To a certain extent, Eleanor Sidgwick agreed that there was a difference in the way in which men and women thought and learned. Consequently Newnham, under the Sidgwicks, followed the principle that it was better to adapt the curriculum and existing Cambridge framework to suit the needs of women. The Newnham Register makes the note that "the policy adopted by the College was that each student while in residence should take the course of study which was best suited to her attainments and her future plans without necessarily attempting to fulfill the regulations laid down for men undergraduates."¹⁹¹

Information was restricted and defined within the social limits of class and sex and what was acceptable within existing nineteenth century social values and behaviour. Whether Sidgwick truly believed there was a difference is difficult to tell, as not only was she necessarily conditioned by her own time, but she was also conscious that the male establishment would seize upon anything which could be deemed as evidence of

¹⁹⁰ Boughey (1897), pp. 509, 511.

¹⁹¹ *Newnham Register*, p. iii. This was a different view to that of Emily Davies, founder of Girton in 1868, the first all-female college in Cambridge, who believed that men and women should be treated on absolute equal terms. A further example of how interest groups did not necessarily make decisions by class or gender loyalties.

unladylike behaviour, or ill-health caused by excess work (or indeed information overload). Historian Helen Fowler agrees that “the Sidgwicks may have held unconventional views on many subjects but they did not tolerate unconventional behaviour in students. The place of women in Cambridge was too tenuous to allow any challenges to the social norm.”¹⁹²

As a further response to criticisms and concerns over the fragility of the girls studying at Newnham, Sidgwick put together a report, published in 1890, which used statistical information to argue that women were not adversely affected by studying and being informed at a university level. The data was collected by sending questionnaires out to past students, asking them to rank their health on a sliding scale from excellent to bad “between the ages of 3 and 7 years, 8 and 14 years, 14 and 18 years, at the time of entering College, during College life, and since leaving College.”¹⁹³ The questionnaire also asked for details of the student’s social and parental background, marital status, occupation and diet and compared this with each girl’s sisters or cousins who had not attended university, so as to give some sort of comparison. The resulting report was 100 pages of complicated statistical tables, which unsurprisingly concluded with the remarks that “any serious alarm as to the effect of university education on the health of women is groundless.”¹⁹⁴

The reliability of these statistics, particularly the manipulation of some of the data, is certainly questionable, not least in that each women who volunteered information was in effect defending her own time at university, therefore making for potentially rather subjective responses; however, what is interesting is the effort gone to by Sidgwick to produce ‘scientific’ statistical evidence of the Newnham girls’ physical ability and biological potency in order to silence their critics. It is highly reflective of both the rise in the use of statistics during the Victorian period, and also the nineteenth century obsession

¹⁹² Fowler (1996), p. 19.

¹⁹³ Sidgwick (1890), p.6.

¹⁹⁴ Sidgwick (1890), p. 91.

with measuring of all kinds. Measurements were used to identify criminals, the mentally ill (by Victorian standards), professional inclinations and within academic research.¹⁹⁵

The statistical argument had changed somewhat since the Condition of England Question in the 1830s, where Porter had claimed in 1851 that through the use of statistical information, the elites had “been awakened to the duty and the necessity of making provision for the education of the people”, by showing that ‘the people’, by which he meant the lower classes, specifically men, were weak, neglected and unable to help themselves.¹⁹⁶ By the late 1880s, when Sidgwick was researching her study, the aim was to prove that women were physically strong and mentally competent – while still retaining feminine and nurturing values – and it was for these reasons that they should be recognised as having a right to university education.

Following her published study in 1890, she spent a period of two years between 1898 and 1900 collecting personal and intimate information on the girls at Newnham. In the College archives there are 150 unpublished index cards, which detail explicit and very personal measurements and physical attributes (see figs. 2a and 2b, pp. 86, 87).¹⁹⁷ The overall impression is one of an extremely intrusive study. There has only been brief discussion of them in historical literature.¹⁹⁸ During this two year period, Miss Clough (the first Principal of the College) wrote to Francis Darwin (the son of Charles) and

¹⁹⁵ Glendinning (1969), p. 42; Cohen (1985); Small, (1998), p. 15.

¹⁹⁶ Porter (1851), p. xxi.

¹⁹⁷ These include space for descriptions of skin (pale, ruddy, dark, freckled); hair (red, fair, brown, dark, jet-black, straight, wavy, curly); eyes (light, medium, dark); face (long/narrow, medium, short/broad); cheekbones (inconspicuous, prominent); ears (flat, outstanding); and lobes (absent, present). Following this, there is room for the actual measurements for each individual’s head (length, breadth, and height measurements); nose (length, breadth, profile measurements); face (length, upper face length, breadth, inter ocular breadth, bigonial breadth measurements); height, span, weight, breathing power, strength (pull as archer, squeeze of right and left hand); eyesight (right and left eye measurements), colour sense (i.e. normal or colour blind). In addition to this, there is space for (although few are completed) Cephalic Index, Nasal Index, Total Facial Index, and Upper Facial Index. Newnham College Archives, “*Descriptive cards of Members, 1898-1900*”.

¹⁹⁸ Beard (1996), p. 23; Fowler (1996), p. 20.

requested that he stopped by the College “after the girls have been measured... [and]... kindly give us some information about these measurements”.¹⁹⁹ There is no date on the letter but a reference to ‘Saturday 19th December’ would make the year either 1885 or 1891, as Miss Clough died in 1892. This would suggest that the girls at Newnham were being measured for some time before the index cards were printed.

Paradoxically, to a certain extent these statistical arguments served to reinforce the idea that the Newnham women’s physical potency made them suitable for domestic life and motherhood. This fed back into the debate about *what* women should be learning and what information they should know. Society deemed that there were certain subjects that were not suitable for ladies. In November 1873 a male lecturer at Cambridge wrote to Henry Sidgwick saying that his lecturers for that term were clinical ones at the hospital and therefore “my lectures are not suited for ladies...mixed classes of young men and women in hospital wards and clinic lectures are in my judgment highly objectionable”. However, he continues that in the following term he will be conducting lectures within the University “on the Causes & Prevention of Disease, and I should have no objection to ladies attending them”.²⁰⁰ In other words, it was not deemed suitable for a lady to gain information in hospitals where she may actually *see* someone dying, but learning how to prevent and nurse such conditions was more appropriate to her feminine status (Florence Nightingale had done much to improve the reputation of nursing as a career for young women by the 1870s).²⁰¹

¹⁹⁹ Newnham College Archives, Letterbook - Letter from Miss Anne Clough to Mr. Darwin, 16th December *n.d.*

²⁰⁰ Newnham College Archives, Sidgwick Papers, *Letters about... becoming members of the Association* - Letter from G. E. Pagot to Henry Sidgwick, 18 November 1873.

²⁰¹ See Small (1998), pp. 17-18; London Metropolitan Archives, Florence Nightingale Collection HI/ST/NC8/14/d – Letter from Florence Nightingale to War Office from the Barrack Hospital in Scutari, 1 May 1855.

No. <i>101</i>		Date <i>Nov. 8. 1898</i>		
NEWNHAM COLLEGE.				
NAME	<i>Louisa Darbishire</i>			
COLLEGE..	<i>Newnham College</i>	AGE ...	<i>20</i>	
BIRTHPLACE ...	<i>Pennamoor</i>			
What district do your Father's people come from?.....	<i>Lancashire</i>			
What district do your Mother's people come from?.....	<i>ditto</i>			
SKIN :	Pale	Ruddy	Dark	Freckled
		<input checked="" type="checkbox"/>		
HAIR :	Red	Fair	Brown	Dark
		<input checked="" type="checkbox"/>		
	Straight	Wavy		Curly
EYES :	Light		Medium	Dark
			<input checked="" type="checkbox"/>	
	Long, Narrow	Medium	Short, Broad	CHEEK-BONES
FACE :		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	inconspicuous
				prominent

Figure 2a: An example of one of the Newnham College statistical cards of 1898-1900: front.

Reproduced by kind permission of the Principal and Fellows, Newnham College, Cambridge.

EARS ...	Flat	Outstanding	LOBES:		absent
	X				present
HEAD: length	18.3	breadth	14.8	height	12.6
NOSE: length	4.7	breadth	3.2	profile	slightly concave
FACE ...	Length	Upper face length	Breadth	Inter ocular breadth	Bigonial breadth
	10.7	6.1	13.	3.1	9.9
HEIGHT	5ft. 5ins		SPAN	5ft 4.4ins	
WEIGHT	108 4 lbs.		BREATHING POWER 210 c. ins.		
STRENGTH, in lbs.	Pull as archer		Squeeze		
	68		right hand	left hand	
EYESIGHT	Right eye		Left eye		Colour sense
	71 — 13		66 — 13		normal
Cephalic Index			Total Facial Index		
Nasal Index			Upper Facial Index ...		

Figure 2b: An example of one of the Newnham College statistical cards of 1898-1900: back.

Reproduced by kind permission of the Principal and Fellows, Newnham College, Cambridge.

This kind of conflict between academic education, domestic advice on how to manage a household (or a “practical education”) and statistical evidence of physical ability, can be seen to mirror the dictionary definitions with which this chapter began and wider Victorian values and social norms of social status and etiquette, social Darwinism, eugenics and scientific data. For Eleanor Sidgwick and those involved with debates over women’s right to university education, information was a fluid concept, but one whose semantic meaning had to operate within the existing framework of what was acceptable. This domestic and behavioural relationship with information is something more common

to the latter end of the century, which will be discussed further in Chapter Four, *Etiquette and Behaviour*.²⁰²

3.7 Contribution to Knowledge

Although this has been a series of discrete case studies, it has allowed for some real exploration of the different ways in which information was perceived and understood during the nineteenth century. The fluidity of language and semantics in general and of information specifically, during this period, demonstrate how words could change their cultural meaning across the century.

Each study was quite distinct from the others in terms of historical context and consequently the semantics and understandings of information also vary between each individual. For Wellington, information is tied to the eighteenth century notion of being informed, a means to an end, rather than something specific in itself. The case of Florence Nightingale showed a dichotomy of public and private attitudes to information and the significance of rational, purposeful information, visually presented in order to make a strong argument. For Julius Reuter, information becomes recognisable as a cultural and commercial commodity, to the extent that by the end of the century it is even influencing the semantics of language itself. Information can be understood in this study as an end in its own right, rather than a means to achieve something else. Finally, Eleanor Sidgwick also showed the balance between private and public information and the importance of information both operating within and challenging existing social and cultural behavioural norms.

Despite the individuals discussed here having very different social backgrounds and perceptions of information, there are some strong themes that run throughout these four studies that begin to focus the research questions posed. We can already say that information had multiple meanings during the nineteenth century and that these varied between individuals and differing contexts: understandings and perceptions of

²⁰² See Chapter Four, *Etiquette and Behaviour*, pp. 90-126.

information were far from homogeneous. In a recent book on the early information society, the research of this chapter was noted as demonstrating that:

Even in Victorian Britain, as Weller and Bawden (2006) observe, although the term 'information' became commonly used in its everyday sense it was only rarely conceived as an 'independent' phenomenon or resource which could be divorced from a particular context.²⁰³

In later chapters of this thesis, this idea is advanced to argue that over the course of the century the notion of information did become more explicitly recognised as a thing or idea in its own right as opposed to simply being informed. This was a significant shift from pre-modern understandings to modern perceptions of information. This is discussed more fully in Chapter Seven, *Bringing it all Together*.²⁰⁴

In the following chapters, some of the themes that emerged during this chapter are further explored; information etiquette and the conventions of social behaviour, information as a cultural commodity, and the relationship between information, the public and being informed.

²⁰³ Black *et al* (2007), p. 238. The reference to Weller and Bawden (2006) is a paper based on the research of this chapter.

²⁰⁴ See Chapter Seven, *Bringing it all Together*, pp. 205-208.

Chapter 4

Perceptions of Information: Etiquette and Behaviour

4.1 Introduction

In the last chapter it was argued that information played a recognised and varied role in nineteenth century society and that perceptions of it were varied and depended greatly on the social and cultural context. The perceptions of information held by Wellington, Nightingale, Reuter and Sidgwick, were formed by their individual values and accepted social norms in the face of change. It would be erroneous to talk about nineteenth century society without some discussion of etiquette, which formed such a consciously significant part of many middle and upper class lives. It had not always been possible to trace authors since it was common to write under pseudonyms and publication statistics on this genre are incomplete where they exist at all. Yet, the popularity and continued commercial success of etiquette books over the century are indicative of their importance in Victorian society.²⁰⁵

This chapter examines the idea of Victorian social norms in the face of change through the concept of etiquette and the genre of etiquette books.²⁰⁶ Specifically, it argues that the standardisation of behaviour, through notions of etiquette acted as a control mechanism, helping to manage the pace of social change peacefully during the Victorian period. It also suggests a new perspective on how information was shared and reproduced amongst middle class audiences, and what kinds of information were being dispersed as part of the

²⁰⁵ This is discussed in more detail later in the chapter. See p. 101.

²⁰⁶ For the purpose of this chapter some brief distinctions must be made. Although the two are both discussed, the concept of etiquette as a behavioural standard is something distinctly different to the actual genre of etiquette books. Also, Society – with a capital ‘S’ – refers to a select group of aristocracy, or the inner social circle; whereas society with a small ‘s’ refers more generally to a community of people.

broader notions of etiquette. This research suggests that such books disseminated information on topics much broader than conventions of behaviour and good manners.

The relationship between courtesy literature, silver-fork novels and etiquette books is also discussed and, although fuller explanation for each genre is given throughout the chapter, it may be useful to introduce a basic working definition at this point. Essentially, courtesy literature was predominant during the eighteenth century and earlier, tending to be written by members of the great families for a selected audience of elites. Courtesy literature was concerned with discussion of good moral character and was often based upon classical ideals or texts, reflecting the ideas of noblesse oblige, or that the wealthy should look after those less fortunate. In contrast, silver-fork novels appeared during the end of the eighteenth and early decades of the nineteenth centuries. These were a more popular examination of manners and society, which were both escapist fantasy and also censorious judgment of the aesthetic frivolity of the period. Finally, comes the genre of etiquette, which is a uniquely Victorian development. The first etiquette book was published in 1834, with the characteristics that define the genre. More regulative, prescriptive and formulaic than courtesy or silver-forks, etiquette remained constant in some form until the end of the century and beyond.

Etiquette books of any era are in their most basic form cultural disseminators of information. Nineteenth century authors described them as written “for those who *do not know*,”²⁰⁷ or as “containing full information,”²⁰⁸ or as “a source of unimpeachable *reference*”.²⁰⁹ Since etiquette evolves within culture and is dependent upon it, an examination of its literature (as well as more general notions of etiquette) allows for a holistic and historicist view of nineteenth century perceptions of cultural and social information, and in so doing suggests an alternative view of the Victorian information society.

²⁰⁷ Day (1836), p. 3.

²⁰⁸ Beeton (1876), p. 1.

²⁰⁹ *The Book of Fashionable Life...* (1845), preface.

The existing literature on the information society in the nineteenth century concentrates on technological and organisational managed change (such as the development of bureaucracy, communication infrastructure, rise of the professional and so forth); I propose that there was a social parallel occurring through the regulation of behavioural codes.

Early nineteenth century England faced a (perceived) social crisis of control, particularly from the emergent middle class, who challenged the traditional aristocratic preserves of power. This social crisis of control during the early part of the century was headed off by the organic development of courtesy literature into more formal notions of etiquette, which demanded a much more standardised and regulated code of behaviour. This codification was based upon the values of the traditional power base, thus allowing aristocratic dominance of political and economic institutions well into the century, while at the same time allowing social (and other forms) of change, but at a controlled and regulated pace. Such behavioural standardisation of society mirrored the regulation and codification brought about by information technologies and infrastructures occurring throughout the nineteenth century in government, business, railways, time-keeping, the press and libraries.

This is a complex subject; this chapter combines historical analyses, theories on the origins of the information society, sociological commentary of behaviour and social control, and offers an explanation to correspond with the chronology of the nineteenth century. It can also be understood as a social application of Beniger's crisis of control theory,²¹⁰ which is discussed more fully later in the chapter. The chapter follows a precise chronological framework in order to make the most sense of the source material and argument: pre-1800, 1800-1834/1837 (when the first Victorian style etiquette book was published and when Victoria came to the throne), and 1834/37-1900. The parallel between the chronology of social and political developments and the emergence of etiquette from what had gone before are striking. To understand these implications, it is

²¹⁰ Beniger (1986).

necessary to look at the context in which etiquette ideas and its literature were developing.

4.2 A social crisis of control

4.2.1 Pre-1800

Braudel's incredibly detailed study of life before the nineteenth century concludes that between 1500 and 1800 we see "the prolongation of an ancient society and economy, which are very slowly, imperceptibly being transformed".²¹¹ Ideas of paternalism and *noblesse oblige* existed instead of any real state welfare. While there were methods of social control through legislation such as the Sumptuary Laws, these were top down forms of social order enforced by the state rather than the organic and self-perpetuating regulation created by etiquette during the nineteenth century. The pace of change created by industrialisation at the end of the eighteenth century was radically different – urbanisation, population increases, speed of communication and transportation, dissemination of information all challenged the existing regularity of life.²¹²

4.2.2 Early industrialisation 1800-1837

Between the turn of the century and 1837, when Victoria came to the throne, industrialisation, urbanisation and the economic reality of over two decades of war with France had a tangible affect on the pace and style of life, particularly in the years between 1811 and 1819. Social unrest and economic crisis precipitated the Peterloo Massacre in 1819, the Cato Street Conspiracy of 1820 and the Swing Riots in 1831, were just three of the many events which added authenticity to elite and government fears of revolution in England.²¹³ The severe manner in which these events were handled and the repressive Six

²¹¹ Braudel (1981), p.28.

²¹² Perkin (1969); Floud & McCloskey (1994); Weller & Bawden (2005).

²¹³ Peterloo - a peaceful mass rally confirmed government fears of radicalism and led to hundreds of people injured by military intervention. Cato St. Conspiracy - only eight years after Spencer Percival's murder, a

Acts of 1819, which attempted to suppress the radical press and prevent radical meetings and uprisings, showed that Wellington was certainly not alone in his apprehension of such dramatic socio-political change in the early decades of the nineteenth century.²¹⁴

Social commentators felt this apprehension as well as politicians. Writing in 1834 in the aftermath of the Reform Act, the Tory journal *Fraser's Magazine* was expressing its concern over the "dangerous chasm" between the higher and lower classes.²¹⁵ Another feature of *Fraser's* at this time was a regular verse by 'Prince Pungent' who satirised the political situation:

And Fox has paid his debt – but Grey remains,
To spread French poison through our veins.²¹⁶

This referred to the Whig Charles James Fox who had championed the values of the French Revolution in 1789, appearing to many as encouraging radicalism in England (he ultimately split the Whig party over the issue). He died in 1806 and was succeeded as leader of the Whigs by Charles Grey. In 1834, when this verse was written, Grey was not only Prime Minister but also had been responsible for passing the Parliamentary Reform Act in 1832 and a series of other reforms during the 1830s aimed to improve the administration of the state. The Reform Act had been passed only because Grey had convinced the King to change the status quo and create new Whig peers in the House of Lords. *Fraser's* satirical lyrics were expressing concern that 'progress' was threatening the established order and the aristocracy:

The Spirit of the Age! And is it so-

plot was uncovered to assassinate the entire British cabinet – five of the conspirators were hanged, five were exiled to Australia. Swing Riots - in which unemployed agricultural labourers smashed the machines that had taken their jobs – nine of the rioters were hanged, over 450 sent into exile in Australia.

²¹⁴ See pp. 56-63 for Wellington's concerns over the country's stability in these early decades of the nineteenth century.

²¹⁵ Mitchell (1834), p. 230.

²¹⁶ Pungent (1834), p.11.

Must war be raised-must blood in torrents flow?
Shall anarchy and fierce rebellion rage,
If it so please the Spirit of the Age?²¹⁷

Since Earl Grey was an aristocrat himself (in fact, Grey was Wellington's direct opponent in parliament on this issue), it was not just the working classes that were feared; there had always been an 'upper and lower' in society, but the emergence of a middle class who had economic and increasingly political strength, those who most represented the 'Spirit of the Age', challenged the traditional hierarchies and positions of control.²¹⁸ This new social strata was less associated with a revolutionary threat as the working class 'masses' often were, but by the 1830s it was evident that they did pose "what was potentially a new definition of legitimate rule outside landowning groups."²¹⁹

4.2.3 The Victorians 1837-1900

And yet, despite the undisputed rise and power of the middle class, the control and dominance of the aristocracy continued up to the end of the century. In fact, although there was massive change throughout the 1800s, there was also much continuity in the social and political infrastructure despite the concern and anxiety of contemporary élites. The aristocracy still held the monopoly on privilege and political power as late as 1880; the House of Lords was, by definition, full of aristocrats and just over 60% of the House of Commons were nobles, baronets and landed gentry. Although further parliamentary reform acts of 1867 and 1884 did allow an increasingly middle-class presence in politics, this was based on a sharing of power, rather than a dominance of it.²²⁰ In 1867, the distribution of the national income for the upper classes was 26.3%; for the upper middle

²¹⁷ Pungent (1834), p.17.

²¹⁸ Perkin (1969).

²¹⁹ Davidoff (1995), p. 77.

²²⁰ Perkin (1969); Daunton (1989); Black & Macrauld (2003), pp. 106-109.

class just 10.6%.²²¹ Traditional centres of power and trust “survived into the industrial period, being restructured to fit changing circumstances and to meet changing demands...A more complex mingling of, rather than simple divergence between, old and new.”²²²

One explanation for this has been the notion of managed change. Aspects of the Victorian information society such as new transport and communication infrastructures, government and business administration and technological developments have all been described as managing and controlling the pace of change during the nineteenth century.²²³ James Beniger proposed the argument that the American industrial revolution brought about a crisis of control due to the unprecedented rapidity of production and transportation across the country and around the world.²²⁴ Beniger makes a strong case that this new technology was operating in a society that did not have the structure to support it. Consequently, this brought about innovations in economic, technological, and processing control.²²⁵

This idea has more recently been applied to Victorian England by Toni Weller & David Bawden who argue that technologies were established without the power to harness, control or manipulate them effectively, forcing *multiple* crises of control in England.²²⁶ “These crises led to developments of control in three broad areas: communication techniques and technologies; organisation, and administration; and the importance of information as a commercial commodity.”²²⁷ It is proposed here that a fourth may be

²²¹ Figures for England and Wales taken from Perkin (1969), p. 420, table 6. Originally collated from R.D. Baxter (1868), where the upper class is deemed to be those earning above £1000, and the upper middle class those earning between £300-£1000. Corrections and recalculations made by Perkin.

²²² Morgan (1994), p. 3.

²²³ Eastwood (1989); Briggs (1993); Higgs (2004).

²²⁴ Beniger (1986).

²²⁵ Beniger's (1986) original control revolution theory omitted any social or cultural reference (aside from some discussion of evolution and biology).

²²⁶ Weller & Bawden (2005).

²²⁷ Weller & Bawden (2005), p. 795.

added: a perceived crisis in *social* control, reaching a climax by the early 1830s. From this viewpoint, the standardisation of behaviour through notions of etiquette acted as a control mechanism, helping to manage the pace of social change peacefully during the Victorian period.

4.3 The beginnings of regulated society

4.3.1 Courtesy pre-1800

Notions of politeness and good manners existed long before nineteenth century etiquette books. In 1939 Norbert Elias published a pioneering work, which suggested that manners, speech, violence and bodily functions had been gradually repressed since the medieval period and that this had formed part of the civilizing process of society. As social networks expanded, so did associations of shame and revulsion with certain kinds of behaviour that became increasingly controlled by individual internal self-restraint.²²⁸

Courtesy writings were not a series of 'conduct manuals' as they became in the Victorian period. Instead they tended to be written in the style of treatises or advice from great family members or elites, reflecting the eighteenth century *noblesse oblige* belief that the wealthy and privileged were obliged to help those less fortunate. Courtesy was concerned with discussion of good moral character and was often based upon classical ideals or texts, particularly notions of moral philosophy such as the fundamental Socratic question 'how should one live?'²²⁹ Courtesy writings offered a stable social philosophy through "theoretical, encyclopedic works for a coterie of the elite whose place in the world was fixed and taken for granted."²³⁰

²²⁸ Elias (2000).

²²⁹ Martin & Stent (1990), pp. 241-245; Carre (1994); Meir (2005).

²³⁰ Morgan (1994), p. 10.

4.3.2 Silver fork novels 1800-1834

Once this “fixed and taken for granted” place in the world was threatened by working class radicalism and more directly by the emergence of the upper middle class as contenders for economic and political control, the values of courtesy literature itself were also challenged. At the turn of the century, the conduct manuals that were appearing retained the prose of courtesy, but did not yet offer a codification of behaviour.²³¹ There were other movements towards the regulation of words and language such as Piozzi’s *British synonymy; or, an attempt at regulating the choice of words in familiar conversation*,²³² which mirrored the transition that was taking place in the dictionaries as discussed in Chapter Three, *Individual Perceptions*.²³³

Between the late eighteenth century and the first codified Victorian etiquette book published in 1834,²³⁴ courtesy literature was replaced by a more popular and commercial examination of manners and society in the form of ‘silver-fork’ novels. These novels were “at once escapist in describing former elegance and glitter... and censorious in judging the frivolities and often supercilious emphasis on the aesthetic rather than the moral that characterised aristocratic high society.”²³⁵

This was also the era of the Romantics and the Regency period, a distinct phase of cultural and aesthetic development in Britain, recognised for its decadence, style, language and individuality, which were all occurring alongside the socio-economic and political crises and tensions of the early industrial period. The Regency excesses and the silver-fork novels were a manifestation of the social dislocation of their time; as

²³¹ Chesterfield (1799); More (1812).

²³² Piozzi (1794).

²³³ See Chapter Three, *Individual Perceptions*, pp. 52-55.

²³⁴ Day (1834), *Hints on etiquette*.

²³⁵ Wagner (2002).

traditional symbols were challenged “style and prose are called upon to justify the stratification of society.”²³⁶

The restrictive legislation on publications created by the Six Acts made subversive comment and free speech difficult to achieve through the press and the silver-fork novels also provided a way of expressing concern and fear through literature. Acting as social commentators some authors, most noticeably Hannah More, “attempted to sweeten their moral and religious principle pills by dispensing them via novels rather than conduct books.”²³⁷ Although often overlooked as popular fiction for a mass audience, they were a nascent version of the Condition of England industrial novels of Charles Dickens, Elizabeth Gaskell and Anthony Trollope that were to come later in the century and dealt with the social issues of the moment.

Courtesy books had been written by the nobility for a select audience of landed gentry, unsuited to the emergent commercial class, who did not have a role as *noblesse oblige*. By contrast, silver-forks and later etiquette were written for (and often by) the emerging middle classes. This audience was not only lucrative – silver-fork publisher Henry Colburn died in 1855 with property worth £35,000, or over £2 million in today’s money²³⁸ - but was also entranced by the dandyish behaviour, wealth and decadence of the aristocracy. Colburn’s recognition that novels depicting the lives and scandals of the aristocracy would be a lucrative market also has implications for the notion of information as a commodity.

Like Reuter, he was selling information, although in Colburn’s case the medium was literature, in a form for which people would be willing to pay. Real names and places were often used in the novels, advertising fashionable brands, and Colburn also published ‘keys’ to decode the people and events referred to in the more popular novels, providing

²³⁶ Moers (1960), p. 13.

²³⁷ Morgan (1994), p. 18.

²³⁸ Updated figure calculated by the Economic History Service EH.net.

another money-spinner and a deeper layer of information.²³⁹ In Sheridan's 1775 play *The Rivals*, the character Lydia Languish has copies of courtesy and conduct books scattered around the room to give the suggestion she was reading them, while actually preferring to settle down to read a trashy novel.²⁴⁰ These novels allowed an escapist glimpse into this other world, describing both the glamour and elegance, while also judging the frivolity and superficial emphasis on the aesthetic rather than the moral as courtesy had done.²⁴¹

4.3.3 Etiquette 1834-1900

In 1834, Charles William Day published the first etiquette book in the style that can now be recognised as uniquely Victorian.²⁴² *Hints on Etiquette* was laid out thematically, with each section dealing with a particular area of behaviour such as introductions, dinners, marriage, smoking, dress, dancing, dealing with trades people and so on, rather than the prose used by courtesy and silver-fork novels. It was also very small and concise, able to fit easily into a pocket and its contents absorbed quickly. Writing only two years after the agitation of the Reform Act, Day suggests that the reason for etiquette is to create rules which are "indispensable to the well-being of society, and without which, indeed, it would inevitably fall to pieces and be destroyed."²⁴³ The rules which followed were also stylistically different to what had gone before; a list of do's and don'ts, short and digestible points relating only to an individual's behaviour at a given moment, rather than any philosophical, moral, or religious discussion about the role of that individual in society. This was the distinctive style of Victorian etiquette books until the last decades of the century and they emerged with great rapidity and popularity from the 1830s.

²³⁹ Adburgham also comments on how late eighteenth century ladies magazines "invited readers to send in any examples of the sins of society which had come within their own knowledge" for publication (1972), p. 139.

²⁴⁰ Sheridan (1775).

²⁴¹ Adburgham (1972); Curtin (1987); Hughes (1992).

²⁴² Curtin (1987); Morgan (1994), p. 20.

²⁴³ Day (1836), p. 2.

Although no comprehensive sales figures for etiquette books exist, it is possible to make some assumptions about their broad impact on their middle class audience. A brief survey of etiquette titles shows that from the 1830s onwards they were published regularly, often going through several editions. In 1837, just three years after Day's original, *The Quarterly Review* published an article discussing eleven separate etiquette books published between 1835 and 1837, several of which were reported to have gone through several printings.²⁴⁴ The *Bibliotheca Londinensis* covered a list of books published in Britain between 1814 and 1846 and its section on "Morals, Etiquette, Etc" listed over 430 titles published during those years,²⁴⁵ although this number could be even higher since the classification of the titles was obviously somewhat arbitrary. Of the forty-eight classifications in the catalogue, works of etiquette could have also fallen into "Domestic Economy", "Juvenile Works, Moral Tales", or "Logic, Moral Philosophy, Ethics". Etiquette itself was parodied and satirised throughout the nineteenth century by commentators as well known as Carlyle, Thackeray and *Punch* and yet, for something to be worth satirising, it must be well known and understood on a popular level. Many of the books contained multiple pages at the front and back advertising other publications. No doubt this was a useful method for the publisher to promote their other works, but that it was worth advertising in etiquette books in the first place suggests there was an audience to read them.

Such rapid popularity and commercial success has led many commentators to note the change in subject matter, moral tone and style between courtesy literature and etiquette. Carre is not alone in his belief that etiquette books were only "a minor aspect of social observation,"²⁴⁶ but this is oversimplifying the role etiquette played. Compared to the depth and morality of courtesy literature, etiquette books appear on first reflection to be much more simplistic and superficial, but this neglects to take into the account the wider context in which they were being written. If it is accepted that etiquette was a control mechanism that regulated behaviour, then these oft-cited factors become less important.

²⁴⁴ Hayward (1837).

²⁴⁵ *Bibliotheca Londinensis* (1848), pp. 177-181.

²⁴⁶ Carre (1994), p. 8.

Viewed holistically, what is more significant is the codified language and style used - distinctly different from what had gone before. The regulative style of etiquette was significant "because the more orderly the form of social structure, the more conflict it can support."²⁴⁷ The *content* of the books was less relevant than the fact that the literature as a whole was standardising behaviour and moving away from Romantic notions of individualism and diversity and the social threats with which the early decades were associated.

Historians and sociologists have often criticised nineteenth century etiquette for lacking the moral and intellectual fibre that courtesy literature had extolled.²⁴⁸ This lack of continuation is often seen as a weakness, as demonstrative of the superficiality of etiquette. And yet, society had changed and was changing. The morality that had been such an intrinsic part of courtesy became represented in other ways during the nineteenth century, namely through the rise and popularity of middle class evangelism. Morgan has noted the apparent inconsistency between the revival of evangelism and the decline of morals in etiquette,²⁴⁹ but this is to miss the bigger picture. The purpose of etiquette was not to teach morality but to regulate middle class behaviour in order to alleviate social crisis.

Courtesy morality also only taught morals to the *noblesse oblige*; during the nineteenth century this was no longer practicable and evangelism used the new Victorian communication and transportation infrastructures to bring morality directly to the new middle class audience of etiquette. Etiquette was certainly not irreligious; there were frequent references to the importance of church and religion, but these were related to everyday life and behaviour rather than individual moral conduct.²⁵⁰ Consequently there

²⁴⁷ Martin & Stent (1990), p. 247.

²⁴⁸ Adburgham (1972); Curtin (1987); Martin & Stent (1990).

²⁴⁹ Morgan (1994), p. 31.

²⁵⁰ For example, issues of what to wear and how to greet an acquaintance in church in Butcher (1847), p. 10; discussion of how Society and Christianity both impose arbitrary rules upon individuals in *The habits of good society* (1859), pp. 85-86; the "mechanical forms" of behaviour employed by the Vicar of Wakefield,

was therefore no need for morals in etiquette in the same way that they had been absorbed within courtesy.

Courtesy literature had not needed to regulate behaviour, but rather to educate and improve the moral character of its audience. The social crises of the first decades of the nineteenth century necessitated a different lesson; not of self-improvement but of self-*regulation*, in order to preserve the traditional arenas of power and control from being threatened. Under Elias' study mentioned above, individuals had gradually exercised increased self-restraint upon their natural bodily functions and modes of behaviour because of the civilising pressure exerted by greater social interaction. The Scientific Revolution of the eighteenth century had allowed a greater understanding of the physical body, which in turn allowed a greater regulation of the body. Under etiquette it was not just bodily functions that were repressed but all manner of dress, thought and interaction were regulated and standardised. Urbanisation and the emergent middle class placed new pressures on the social infrastructure.

The Victorian sociologist Georg Simmel maintained, "a group upon reaching a certain size must develop forms and organs which serve its maintenance and promotion, but which a smaller group does not need."²⁵¹ Etiquette was perhaps unlikely to have been thought of in a homogeneous way by all of its audience, instead practised in different ways by different groups or families. However Simmel's point may suggest why etiquette was imposed so much more rigorously in towns than in the country and why London, the area under most pressure, served as the centre of Society and behavioural standards. Etiquette was an organic development from courtesy, serving the maintenance and promotion of traditional aristocratic vestiges of control when they were under pressure from the increased volume of the upper middle classes in social and political life.

and finally, the family attending church together on Sundays in *Etiquette, politeness, and good breeding* (1870), pp. 9, 36-44.

²⁵¹ Simmel (1908) p. 87.

Marjorie Morgan suggests that “the rise of etiquette books was only one manifestation of a widespread concern about manners and morals during the early industrial period” and argues that early nineteenth century contemporaries saw a renewed emphasis on manners following the decline in moral standards during the Regency period.²⁵² She believes that urbanisation and industrialisation “created a crisis of social confidence” as traditional means for placing trust were threatened.²⁵³ This is a fair point, but her emphasis remains on *morals*, rather than the regulation of behaviour. For Morgan, etiquette was a way of adapting the long established notions of courtesy into a new vehicle – manners and social conduct – to allow a way of “judging moral character” and trust in an England that was increasingly full of anonymous and unpredictable influences such as towns, newspapers and advertising, which “undermined traditional foundations of mutual trust.”²⁵⁴ Along similar lines, Michael Curtin takes the etiquette book on face value as a rule of behaviour for social mobility, rendering them “inconsistent, insignificant, and merely formal” and deprived of their eighteenth century connection with morality “came to seem trivial... almost entirely bereft of and ideas of ‘civilisation’.”²⁵⁵

Etiquette scholars have routinely adopted these arguments. However, they do not take into account the radically different style and language of etiquette books from the 1830s which demonstrate that there was not simply an emphasis upon morals and a framework of trust, but also a regulation and standardisation of behaviour itself. Viewed holistically, the ‘civilisation’ that etiquette was defending was the preservation of the traditional order by controlling the rate of change. Almost unanimously, etiquette authors wrote of a code, of behavioural regulations. Etiquette “is the barrier which society draws around itself as a protection against offences the ‘law’ cannot touch,”²⁵⁶ it “may be defined as a code of laws that bind society together”.²⁵⁷ Behaviour and language are “regulated by good

²⁵² Morgan (1994), p.1.

²⁵³ Morgan (1994), p. 3.

²⁵⁴ Morgan (1994), p. 3.

²⁵⁵ Curtin (1987), pp. 13, 27.

²⁵⁶ Day (1836), p. 9.

²⁵⁷ *Etiquette, politeness, and good breeding* (1870), p. 1.

taste”²⁵⁸ and “consists of fixed rules of conduct for human intercourse”.²⁵⁹ Secondary analyses have also described them in these terms, as the “extra-legal governance of social conduct,”²⁶⁰ or a “framework of constraints.”²⁶¹ Even Morgan describes etiquette as “teaching... a set of proper rules,”²⁶² although, for her, these rules are narrowly related to individual manners rather than the holistic regulation of behaviour.

Control of the social crisis of the early decades of the nineteenth century was manifested through such behavioural codes. Etiquette literature did not stress the importance of morality as courtesy had done, in fact often it professed quite the opposite, suggesting that simply the *appearance* of good manners was acceptable and that acting a certain way in order to help your self-advancement in business, politics, or social mobility was recognised and understood. Samuel Smiles’ influential book *Self-Help* of 1859 advocated exactly such a position even to the extent that “morals and manners... are of greater importance than laws, which are but one of their manifestations.”²⁶³ Arguably then, notions of etiquette and standardised behaviour had a greater and more managed, regulating affect on society than the legislative repression of the 1810s had done.

Nineteenth century and modern writers tend to stress the importance within etiquette of always having consideration for others, summed up by Morgan as the commandment “Do Not Offend.”²⁶⁴ For some, this is an example of the triviality of etiquette, since while writers stressed the “consideration for the feelings of others”, they also likened those who were badly dressed to those who were rude, or, as one 1898 book describes, “those who flagrantly offend the eye... [and] those who offend in word or deed.”²⁶⁵

²⁵⁸ Beeton (1876), p. 22.

²⁵⁹ *Etiquette for ladies* (1857), p. 5.

²⁶⁰ Martin & Stent (1990), p. 237.

²⁶¹ Davidoff (1973), p. 18.

²⁶² Morgan (1994), p. 22.

²⁶³ Smiles (1859), p. 323.

²⁶⁴ Morgan (1994), p. 23.

²⁶⁵ Klickman (1898), p. 120.

Alternatively, when making or accepting a proposal of marriage “the thing must be managed in a careless, matter-of-course way, and with adroitness” to avoid upsetting any individual feelings or causing showy displays of personality.²⁶⁶ Rather than triviality, it shows that the primary role of etiquette was to regulate and standardise behaviour to prevent social crisis and conflict (this included the regulation of appearance which is considered later in the chapter). By stressing the importance of tact and consideration alongside a codification of conduct, change and crisis could be more easily controlled, should they occur.

4.4 Manifestation of control: the acceptance of standardised behaviour

Since the regulation of behaviour was based upon the values of the traditional power base, it allowed the continued aristocratic dominance of political and economic institutions, while at the same time accepting change at a controlled and regulated pace. In sociological terms:

A group secures the suitable behaviour of its members through custom, when legal coercion is not permissible and individual morality not reliable. Custom thus operates as a supplement of these other two orders... Its manifestations, as external behaviour, fashion, or honour, always characterize only a selection of the society, while the whole of this society is dominated by the same law.²⁶⁷

In other words, Simmel is suggesting that custom is something social groups utilise to maintain acceptable behaviour and control. This is particularly relevant, he argues, when state law or personal responsibility do not manage behaviour efficiently. In terms of this chapter, Simmel’s notion of custom appears very similar to etiquette. As has already been discussed, heavy state repression ended just before etiquette literature became popular, and individual morality was something preached by religion rather than Victorian conduct literature. Simmel almost explicitly likens ‘custom’ with etiquette when he refers

²⁶⁶ *The book of fashionable life* (1845), p. 19.

²⁶⁷ Simmel (1908), p. 101.

to “external behaviour, fashion, or honour,” which, like etiquette, characterise only the upper echelons of social behaviour, yet the majority of middle class conduct is regulated by these standards.

Legal coercion by the state was certainly not popular – although there was more state intervention than ever before during the nineteenth century growth of bureaucracy, it was largely viewed with suspicion.²⁶⁸ The coercion and repressiveness of the 1810s and 1820s did not reoccur in the same form later in the century (the regulation of behaviour had imposed its own form of control). Individual morality had been the cause of the social crisis as it challenged and threatened established aristocratic power. This left Simmel’s notion of ‘custom,’ or in other terms, etiquette.²⁶⁹

The influence of social mobility within this dynamic social sphere was subtle. When the emergent middle classes “came to engage in the subtler and far more far-reaching processes of self-definition, it was in terms of the established aristocratic standard that they were inevitably forced to measure their own system of values and code of conduct.”²⁷⁰ That the emergent middle class aspired to become part of this standard kept them in check with the system. They were happy to perpetuate the status quo as long as there was the suggestion that they might benefit from it, or alternatively, “there was some sort of social fagging established; the fag loathed the master, but not the system by which one day or other he himself might be permitted to fag.”²⁷¹ This went down as well as up since it was not uncommon for members of the lower middle-class to work as maids or butlers in richer households. Etiquette books existed to provide codes of behaviour for servants explicitly promising that following the rules would improve their financial and

²⁶⁸ Higgs (2004); Weller & Bawden (2005), pp. 791-794.

²⁶⁹ Born in 1858, Simmel was a product of the society he was writing about. His interest in the city, society and fashion reflect this, and he succeeded in contextualising new notions of etiquette and behaviour while combining ideas from the classical sociologists; Durkheim - problem of individual and society; Weber - effects of rationalization; and Marx – alienation. All these themes are still hugely relevant to the so-called modern information society.

²⁷⁰ Hughes (1992), p. 331.

²⁷¹ Bulwer-Lytton (1833), pp. 287-288.

social situation in life. The exacting list of observances and regulated behaviour was softened by the knowledge that “everyone in the land has some such superior station, till you rise to dukes and princes, who are compelled to observe with a king or queen exactly such strict rules as I have been laying down for you”.²⁷²

This allowed a certain amount of fluidity in social mobility, making etiquette a dynamic structure of behaviour where “a preoccupation with the *listing* of hierarchy and the forbidden contacts between groups [takes place], when, *at the same time*, a great deal of actual mixing is going on.”²⁷³ As early as 1826, James Mill was writing of the “value of the middle classes of this country, their growing numbers and importance, are acknowledged by all.”²⁷⁴ A popular example of such upward mobility is Benjamin Disraeli who was not only middle class but also of Jewish origin, a double burden in Victorian society. He was one of Henry Colburn’s recruits and authored several silver-fork novels including *Vivien Grey* in 1826 and *The Young Duke* in 1831, before becoming Prime Minister in 1868, and again in 1874-1880. The illusion and promise that it was possible to achieve this status helped to perpetuate the standardisation of middle class behaviour.

The exclusiveness of means of entry to Society was less important than the regulated every-day behaviour etiquette imposed. Acceptance of social mobility through etiquette was by no means universal, it was often fiercely satirised and yet even those who satirised it were bound by certain behavioural standards in daily life, if they wished to be accepted socially.²⁷⁵ In satirising etiquette, critics acknowledged its importance and power. In her study of Victorian manners as depicted by *Punch*, Alison Adburgham observes that “true wit can only spring from informed and accurate knowledge of the

²⁷² Motherly (1859), pp. 20-21; Horn (1995).

²⁷³ Davidoff (1995), p. 77.

²⁷⁴ Mill (1826), p. 269.

²⁷⁵ Smith (1849); Thackeray (1855); Adburgham (1961).

subject it comments upon and sometimes mocks. Facts are nearly always funnier than fantasy.”²⁷⁶

In a tradition continued by *Punch*, the political caricaturist James Gillray used the blind adherence to regulated behaviour as a muse for his 1796 print *The Fashionable Mamma*. In the picture, a bored woman is dressed for an evening out, complete with gloves, fan and hat. She leans slightly forward allowing a nurse to hold a baby close enough to breastfeed through the front slits in her evening dress. The slits are a satiric Gillray invention; this particular lady’s dress has been adapted to allow the ‘fashionable’ practise of breastfeeding instead of giving the child to a wet nurse.²⁷⁷ The image is parodied further by the figure of the nurse, a buxom girl with a tender expression (unlike the distraction of the lady), who appears as the physical manifestation of the image in the painting on the wall. The picture offers a direct comparison of the fashionable and natural mamma (see fig. 3, p.110).

Gillray’s visual satire is another demonstration of the influence of silver-fork and fashion in daily life. With the emergence of etiquette in the 1830s, the regulation of behaviour became even more pronounced.

Davidoff and Meir have both examined the codification of domestic life,²⁷⁸ thus showing that etiquette was regulating behaviour, rather than simply a guide to social mobility or a handbook of fashion. Standardisation was encouraged in all spheres of life. Meir’s study shows that “a dining taxonomy begins to emerge – a classificatory system whereby formerly idiosyncratic aspects of this social experience are codified, or reduced to a code, and routinized, or rendered routine.”²⁷⁹

²⁷⁶ Adburgham (1961), pp. 11-12.

²⁷⁷ The practise of breastfeeding was made fashionable by the theories of French philosopher Jean-Jacques Rousseau, who encouraged mothers to suckle their children themselves.

²⁷⁸ Davidoff (1995); Meir (2005).

²⁷⁹ Meir (2005), p. 133.



Figure 3: "The Fashionable Mamma, ... or ... The Convenience of Modern Dress." February 15, 1795. James Gillray published by Hannah Humphrey (1796). Reproduced by kind permission of The British Museum.

Davidoff argues that basic household tasks, such as cooking and cleaning, can be viewed as ways of creating boundaries; what is acceptable and what is not.²⁸⁰ This also expresses the notion of creating and maintaining order through standardisation. However, "the idea must precede the efforts to maintain the boundaries and, therefore, the disorder must first be perceived. The perception of disorder is a cultural artefact which changes through

²⁸⁰ Davidoff (1995).

place and time.”²⁸¹ If disorder can be taken to mean anything that challenges existing classifications and routine, then this explains why the regulation of behaviour does not appear in the form of etiquette until the mid 1830s.

It is no coincidence that the emergence of etiquette in the mid-1830s occurs at the same time as the beginnings of regulation on the railways and basic government bureaucracy – they were all regulators of change, operating within different spheres of the Victorian information society. This argument fits well with the Eliasian concepts of psychogenesis and sociogenesis, that is, that developments in natural behaviour are irrevocably tied up with changes in social habitat.²⁸² Victorian etiquette was a subtle evolution and standardisation in behavioural norms for the middle classes (psychogenesis), reacting against the perceived threat to established social values (sociogenesis). Etiquette was a reaction to the crisis of control of the early nineteenth century; a mechanism to maintain traditional boundaries *after* the (social) disorder had been perceived.

Standardisation and regulation of behaviour invaded every aspect of life; there were etiquette books on the domestic and public spheres, but also on other areas such as business, dancing, travelling, buying and selling homes, and professional conduct.²⁸³ Victorian life was ordered and regulated so there was “a complete absence of all things disturbing or threatening interruptions to orderly existence which would be caused with the intractability, and ultimate disintegration, of things or by the emotional disturbance of the people.”²⁸⁴ Domestically, artificial light, household schedules, gongs and bells to signify meals, clocks, weights and measures in the kitchen created structures made up of shorter, controllable units.²⁸⁵ This in essence created a domestic control order, which mirrored the changing patterns of time and regulation that were happening across the

²⁸¹ Davidoff (1995), p. 76.

²⁸² Elias (2000).

²⁸³ Wilson (1816); Banks (1839); *The Importance of business tact and habit to young men...* (1853); *How to travel; or, etiquette of ship, road, coach and saddle* (1876); Miles (1897).

²⁸⁴ Davidoff (1995), p. 81.

²⁸⁵ Davidoff (1995), p. 86.

railways, business and government, contributing to wider Victorian perceptions of time.²⁸⁶

Printed mediums such as etiquette books created the illusion of reality and as each book was published, it took for granted that what had gone before was the norm; the more something is repeated, the more normal it becomes. Meir argues that such repetition “creates the impression not only that [individuals] should proceed in a precise, orderly fashion but also that they routinely do proceed as narrated.”²⁸⁷ Repetition was usual among many etiquette books, which replicated the same information and rules and regulations of behaviour. Sometimes this was quite consciously done, as authors lifted sections and phrases from other books, or previous editions without due acknowledgement. This was in part done for reasons of profit and pragmatism as shown by a plagiarism court case of 1837, where Charles William Day sued the publishers of *Science of Etiquette* for copying large passages of his 1834 work *Hints on Etiquette*.²⁸⁸

Although Meir is discussing the narrow confines of dining behaviour, the same repetition occurred in many areas of etiquette; behaviour in the street, at a party, in a shop, at a dance, when meeting new people, when in conversation, the list goes on. Such repeated power of suggestion created the *appearance* of accepted regulated behaviour before it became a reality, which eased the transition of social control and standardisation. Cultural control mechanisms are most effective if appearing natural and unobtrusive, especially when compared to the immediate background of coercion and repression of the Peterloo Massacre and Six Acts of 1819. Through etiquette, Elias’ notion of individual self-restraint became not just an accepted social form, but also an *expected* one which no

²⁸⁶ See Morus (2000); Baldwin (2005); and, Weller & Bawden (2005) for discussions of changing Victorian perceptions of time. Discussions of modern conceptions of time brought about by the internet and digital technologies mirror some of the nineteenth century debates regarding speed, social effects and legal implications. See Gold (2000); Lee & Liebenau (2000); and Agre (2002) for the contemporary debates.

²⁸⁷ Meir (2005), p. 134.

²⁸⁸ *Hints on Etiquette* was reported to have sold 12,000 copies between 1834 and 1837 at “considerable profit” – a strong financial incentive for authors to plagiarise and another example of the commercial value of social information. *Day v. Whitaker* reported in *The Times*, July 5, 1837.

longer manifested itself just in terms of control over bodily functions, but also how you spoke, how you dressed, or what you discussed in company.

4.5 Regulation of appearances

During the Romantic and Regency periods and the crisis decades of the late eighteenth and early nineteenth centuries, there was arguably an even greater emphasis on the aesthetic than there had been during the eighteenth. The Prince Regent made his first appearance at the House of Lords in 1783 “extravagantly attired in black velvet lined with pink satin and embroidered with gold and pink spangle, pink high-heeled shoes, [and] his hair frizzed.”²⁸⁹ Inanimate objects were often as decorative as individuals. In a very real example of style over substance, nineteenth century socialite and silver-fork author Lady Blessington received guests in the room of knowledge, “the library...

the walls were almost entirely covered with books... But the shelves, or at any rate the edges of them, instead of being dark, were of that enameled white which looks like ivory, small interstices being filled up with looking-glass; the panels of the doors were also of looking-glass, and the handles glass.²⁹⁰

Aesthetics such as these could not fail to convey information visually; wealth, decadence, individuality and power. Such apparent concern with the trivialities of fashion was not universally approved of – the silver-fork novels highly satirised it, as did some of the greatest intellectuals of the day. Thomas Carlyle’s *Sartor Resartus* of 1831 made the point that “no Life-Philosophy such as this of Clothes pretends to be... can attain its significance till the Character itself is known and seen.”²⁹¹ Fashion and its extravagance were associated with the social crises of this period and the dichotomy of appearance over reality is a recurrent theme in Victorian etiquette. In England “one constantly

²⁸⁹ David (1999), p. 48. Original description from *Cobbett’s Parliamentary Papers*, XXIII, 1123-5.

²⁹⁰ Foulkes (2003), pp. 289-290.

²⁹¹ Carlyle (1831), Book I, p. xi.

encounters a concern for outward *appearances*.”²⁹² The rules of behaviour were even likened to the opaque machinery of state whereby “because Etiquette lays down rules by which you are to *appear* to have a heart, she does nothing worse than the laws of the realm, which show how you may *appear* honest.”²⁹³

In a society that was undergoing massive political, bureaucratic and technological changes, the *appearance* of maintaining the established order and values became significant in easing the transition. In her study of the Regency period, Hughes argues that “the arbiters of fashion attempted to control change by incorporating it into their capricious standard of dress and behaviour... In the long run;

such tactics proved undeniably successful in ensuring the survival of aristocratic social dominance... but only at the price of acknowledging the forces of competition and change, and thus in effect letting them in the door.”²⁹⁴

Hughes regards this as a weakness, an unintended consequence of the literature of the period, but in fact it was the reason for the success and acceptance of the literature among the middle class and for the survival of the aristocracy. In acknowledging the power of the middle class, but controlling it on their own terms, the elites ensured that true exclusiveness, such as had happened in France in 1789, did not occur in England. Change was increasingly controlled and managed by regulating the outward *appearance* through fashion.

Thus modes of dress and speech were standardised by etiquette as well as individual behaviour. By the middle decades of the century “you did things, and wore things, and said things because other people did them and wore them and said them,”²⁹⁵ and “if

²⁹² Tristan (1842), p. 272.

²⁹³ *The habits of good society...* (1859), p. 241.

²⁹⁴ Hughes (1992), p. 334.

²⁹⁵ Adburgham (1961), p. 16.

[etiquette] regulates your dress, it is that there may be an appearance of equality in all.”²⁹⁶ *The Book of Fashionable Life* argued that “we must establish a *standard* of one kind or another. How, otherwise, can we hope to refine or improve the mass?”²⁹⁷ Even as late as 1898, it was recognised that when travelling it was more socially acceptable to blend in with everyone else by wearing plain attire, rather than “perpetually changing your dress, appearing in new colours every day, and endeavouring to attract attention.”²⁹⁸ There was a “Great Masculine Renunciation” where middle class men gradually moved to give up bright colours and finery in their clothes, and instead adopted a sober and conservative business dress in an attempt to gain socio-political legitimacy during a time of social flux.²⁹⁹

Although Brent Shannon has recently challenged Flugel’s notion of a masculine renunciation,³⁰⁰ the theory still retains much of its original influence. Shannon challenged traditional notions of Victorian masculinity by arguing that men were active consumers of fashion by the second half of the nineteenth century and that they used fashion to *escape* the confines of accepted masculine behaviour. Shannon’s argument and the notion of a Great Masculine Renunciation are not mutually exclusive, since a middle class male market for fashion still operated within the confines of regulated behaviour and controlled change. In any case, fashion, and having the money to spend on decadent clothing, were associated with the aristocracy and so if middle class men did become consumers as Shannon argues, this is surely another example of the middle class buying into the ideals of upwards social mobility.

Thus etiquette also regulated the challenge posed to the established order through a uniform dress code. The commandment “Do Not Offend” applied to external appearances

²⁹⁶ *The habits of good society* (1859), pp. 85-86.

²⁹⁷ *The book of fashionable life* (1845), p. 11.

²⁹⁸ Klickmann (1898), pp. 95-96.

²⁹⁹ Flugel (1930).

³⁰⁰ Shannon (2004).

as much as to the regulation of individual behaviour.³⁰¹ The standardisation of dress facilitated behavioural regulation since it made it possible to visually separate those who literally stood out from the crowd. It was another way of perceiving disorder and creating boundaries of what was acceptable and what was not, so as to ensure “a complete absence of all things disturbing or threatening interruptions to orderly existence.”³⁰²

The aesthetic was still important but its role had changed; by deviating from the norm, individuals revealed clues about their social status and background that allowed others to make value judgments about them. Tacit and visual information could be read from your appearance, so that observers “cannot help forming some opinions of a man’s sense and character from his dress. All affectations in dress implies a flaw in the understanding”.³⁰³

In one etiquette example of 1858 a mother and daughter are assessing an unknown young man they have come across on a train. The daughter believes he is of good background since he is polite and well dressed, but her more experienced mother recognises the tacit signs that he has more humble origins, and is later proved correct when he comes to their door as a tradesman.³⁰⁴ Even material possessions could reveal information about you. The calling card “conveys a subtle and unmistakable intelligence. Its texture, style of engraving, and even the hour of leaving it, combine to place the stranger whose name it bears in a pleasant or disagreeable attitude, even before his manners, conversation, and face have been able to explain his social position”.³⁰⁵

Since clothes, speech and possessions represented the individual, and the individual was becoming regulated through standardised behaviour, any apparent “breach of the traditional and unwritten laws”³⁰⁶ of etiquette could be severely judged:

³⁰¹ Morgan (1994), p. 23.

³⁰² Davidoff (1995), p. 81.

³⁰³ *Etiquette for all* (1861), p. 40.

³⁰⁴ *Conduct and carriage* (1858), pp. 174-175. Quoted in Curtin (1987), pp. 104-109. It was not possible to trace the original text.

³⁰⁵ *The glass of fashion* (1881), p. 60.

³⁰⁶ *The habits of good society* (1859), p. 19.

What style is to our thoughts, dress is to our person. It may supply the place of more solid qualities, and without it most solid are of little avail. Numbers have owed their elevation to their attention to the toilet. Place, fortune, marriage, have all been lost by neglecting it.³⁰⁷

Etiquette authors also stressed the social rewards of following the rules. By conforming to the regulation of appearance “people of both sexes will begin to like you better and pay you more attention”, thus perpetuating the aspiration of upwards mobility.³⁰⁸

It was not just the aesthetic appearance and possessions that provided information on unregulated behaviour. Etiquette strongly encouraged the repression of unconscious physical mannerisms (in the style of Elias). A “constant smirk upon the face, and a whiffling activity of the body, are strong indications of futility”, while drumming on tables, tapping with fans or canes, jiggling rings on fingers, or humming or whistling should all be controlled and repressed.³⁰⁹ The reality of these types of mannerisms could be hidden by creating an appearance of “exterior polish,”³¹⁰ implicitly suggesting a form of social Panopticon where everyone and anyone could be looking out for visual or tacit clues on everyone else.

The French observer Flora Tristan noted that England was unique in Europe for allowing, “fashion, etiquette and prejudice [to] exert such monstrous tyranny... violent animosity against anyone who wishes to preserve his individuality.”³¹¹ Such an inference also acted as a control mechanism that sustained the regulation of behaviour. This did not go unnoticed by the critics of etiquette who compared its rules and conformity unfavourably with those of the more liberal legislative:

³⁰⁷ *Etiquette for the Gentleman* (1838), p. 9.

³⁰⁸ *Etiquette for ladies* (1857), p. 19.

³⁰⁹ *Etiquette for all* (1861), p. 17; Beeton (1876), pp. 121-124.

³¹⁰ Humphreys (1897), p. 11.

³¹¹ Tristan (1842), p. 26.

No opposition is tolerated, and no appeal allowed. The truth is therefore never heard; for as all want to be thought not only as zealous votaries but active members of the executive.³¹²

The regulation and standardisation of behaviour attempted “to reduce all men to the same level, the level of drilled mediocrity.”³¹³ Yet mediocrity did not pose so much of a threat as independence, diversity and individualism that could challenge existing areas of aristocratic control and status quo. Self-monitored standardisation encouraged a more measured rate of adjustment to the emerging Victorian information state.

The standardisation of appearance also encouraged controlled change. The emergent middle classes were warned that “we can take ready measure of your intellect and character by your conversation; and your culture is *at once* disclosed by it”, encouraging them to read, to become educated, and to hold opinions, in order to smooth the progress of their upwards mobility.³¹⁴ Since etiquette was based on the values of the aristocracy, it was also the opinions and education valued by the *elites* which were imposed by etiquette authors on to their middle class audience. Since educated middle class opinion was therefore founded on the ideals of the upper classes, this helps to explain why it was deemed ‘good’ opinion worthy of listening to during times of reform, as opposed to the popular clamour of working class feeling as discussed in Chapter Three, *Individual Perceptions*.³¹⁵

This ultimately had an ironic twist. The increasing importance of the popular press meant that by the end of the century the aristocracy was complaining, “public opinion decrees who shall reign as the queen of fashion, or the acknowledged beauty; and public opinion,

³¹² Mitchell (1834), p. 97.

³¹³ Mitchell (1834), p. 99.

³¹⁴ *Etiquette for ladies* (1857), p. 34. Also see *The habits of good society* (1859), pp. 55-67; and Humphrey (1897), p. 30.

³¹⁵ See Chapter Three, *Individual Perceptions*, pp. 56-63.

like all irresponsible tribunals, is exceedingly capricious.”³¹⁶ The regulation of behaviour had succeeded in controlling the social crisis of the early 1800s and had preserved the aristocracy and many of their values by managing the rate of change. But, by the last quarter of the century, other aspects of the Victorian information society began to play a more direct role on etiquette, changing the direction it was to take as it entered the twentieth century.

4.6 The crisis controlled: 1880-1900

By the 1890s, when Lady Greville was writing, a change had become evident in the style and content of etiquette books and within the notion of etiquette itself. Stylistically the books had become less like lists of codified behaviour and more general essays on social life interspersed with behavioural commentary. Day’s 1836 edition of *Hints on Etiquette* took fourteen pages to list the rules of dinner – if invited to wine, never refuse; do not drink it all, just taste it; never use your knife for eating; do not pour sauce over food; do not overload the plate; do not make noise when you eat; do not speak harshly to servants.³¹⁷ The early etiquette books covered specific social situations or events such as being introduced, dining, marriage, visiting, and conversation.³¹⁸

In the 1840s there were a flurry of separate books dealing with court society and being presented.³¹⁹ Since this was just after Victoria’s accession in 1837 and her marriage to Albert in 1840, this emphasis can be seen as an example of opportunist commercial information – at the same time as Reuter was using the new technology of the telegraph to relate news of the birth of Victoria’s second son in August 1844, publishers were

³¹⁶ Greville (1892), p.64.

³¹⁷ Day (1836), pp. 20-34.

³¹⁸ Day (1836); *Etiquette for the ladies* (1837); *Etiquette for gentlemen* (1838); Combe (1840); Butcher (1847).

³¹⁹ *The book of fashionable life* (1845); *The English gentlewoman* (1845); *Court etiquette* (1849); *Court manual of dignity and precedence* (1849); Douglas (1849).

tapping in to the public interest in the monarchy and combining it with an established market for information.

Around mid-century, other topics were beginning to be introduced such as the toilette and tips on economy, and there was more description and information in each section rather than simply short bullet points standardising what to do and not to do. By the 1880s and 1890s the style of etiquette books had dramatically changed from those that had been immediate reactions to the crisis decades in the early century. In stark contrast to Day's dining taxonomy, Mrs. Humphrey now took five chapters and 44 pages to discuss the complexities of dining, and instead of informing what should not be done, described what to expect, speculated on the reader's feelings and intentions and offered anecdotes of her own experiences.³²⁰ Even if not all authors were as lengthy as this, the descriptive informal style was common and a distinct move away from the regulative and codified form that had come previously.

In his study of American etiquette books during the late nineteenth and early twentieth centuries, Arditi suggests that a more informal and decentralized style of etiquette was representative of "a reconfiguration, and reconstitution, of [the] mechanisms" of power.³²¹ Something similar was taking place in England. The longevity and continued authority of the aristocracy in England has already been established, but by the last decades of the century the middle classes were more dominant in local government, the press, commerce, professional life and education (other than Oxbridge). Etiquette had allowed controlled, gradual change in social values alongside other developments of control in "communication techniques and technologies; organisation, and administration; and the importance of information as a commercial commodity."³²² Between the two parliamentary reform acts of 1832 and 1867 while power may have been shared, "the value system was remade... and the outcome was much closer to the

³²⁰ Humphrey (1897), pp. 55-96.

³²¹ Arditi (1999), p. 25.

³²² Weller & Bawden (2005), p. 795.

views of the business elite than to the traditional standards of the aristocracy.”³²³ By the last decades of the nineteenth century, these changing power structures and new socio-political values were reflected by the less regulative style and content of etiquette.

One of these changes was the growth in household manuals, cookbooks, and domestic information within etiquette from the 1860s and 1870s. What makes them particularly different to their predecessors was that instead of instructions on how to *behave* in the home, they stressed the value of domestic management and of domestic economy in a woman’s education.³²⁴ These etiquette books were emerging against a background of more general debate over the content of women’s education, where the need for practical information on how to run a household was cited as a key argument against women’s academic study at university.³²⁵ They were also emerging in the context of scientific and medical developments on hygiene and sanitation post-Crimea. Some etiquette books even quoted Florence Nightingale’s writings in support of their advice to consider a good “water supply and ventilation” when buying a new home.³²⁶ In the light of this there also appeared guides on domestic hygiene.³²⁷ Although etiquette on how to behave remained popular such reference guides, descriptive accounts and a less regulated style diluted it, as middle class values became more independent and less standardised.

Accordingly, in professional spheres where middle class influence dominated, there emerged specialised codes of practise and professional behaviour. Using a combination of the established regulative medium of etiquette, but based upon specialised information and middle class values, “professionalisation became a process whereby *any* occupation could enhance its status by adopting certain recognised organisational forms.”³²⁸ The regulation and standardisation that had been imposed on social behaviour now became

³²³ Daunton (1989), p. 132.

³²⁴ Beeton (1861); *Etiquette for all* (1861); Hassell (1973); *The lady’s every-day book* (1875); Beeton (1876); Mitchell (1896); Miles (1897).

³²⁵ See discussion of Newnham and Eleanor Sidgwick in Chapter Three, *Individual Perceptions*, pp. 79-87.

³²⁶ Beeton (1876), pp. 103-105.

³²⁷ Pridgin (1879); Wilson (1880); Dutton (1894); Cartwright (1900).

³²⁸ Morgan (1994), p. 133.

obligatory in institutions and professional conduct. Journalism, science, engineering, law, accountancy and librarianship all established basic standardised codes of behaviour during the latter half of the century.³²⁹ Professional ethics were in essence codified relationships between the profession and the public, standardising the quality of work and maintaining control of the profession's reputation. The middle classes had taken the behavioural codes of the aristocracy and voluntarily applied them to their own spheres of control (another example of how deeply embedded and accepted such regulation had become).

One of the strongest regulating influences in etiquette literature was the promise of upward social mobility and this remained common throughout the century. Yet it too became less regulative by the closing decades. A vibrant popular press, increased literacy and education, greater disposable income and recreation time, more political representation, growth of the professions, and improved communication and transportation networks all altered the way the middle classes viewed the aristocracy - and the way the aristocracy viewed the middle classes. Instead of threatening to overwhelm the established order and threaten a social crisis, the middle classes were absorbed as part of the pillars of state power.³³⁰

By the twentieth century etiquette was less rigid and formal and demonstrated "the ongoing processes of democratisation and social integration."³³¹ Victorian elites were still respected and esteemed, but there was a greater fascination with the lifestyles of the rich and successful. Instead of proposing a set of rules and codes to mirror aristocratic behaviour and regulate that of the middle class, etiquette began to instead offer insights into what it was like to be presented at court, to attend the fashionable parties of the day, or to meet the celebrities of the moment.

³²⁹ Morgan (1994), pp 132-145; Matthews *et al* (1997); Hampton (1999); Black (2001).

³³⁰ Perkin (1969); Wilson (2002), pp. 572-596; Mattelart (2003).

³³¹ Wouters (1995), p. 109.

Satirists of behaviour such as Thackeray used their fiction to depict the 'famous' showing a "gradual formation of a new category of public experience called *the celebrity*, unmoored from the political or aristocratic underpinnings of older forms of public notoriety and increasingly unlike earlier conceptualizations of fame."³³² Dames makes an interesting case for the emergence of public interest in private and personal information on individuals, and the associated ethical issues with the collection and dissemination of that information, and of the right to personal privacy. The resonance to the modern information society is evident. In the last decades of the century, etiquette, alongside "the influence of the press, gossip columnists, and competing centres of prestige began to raise notorious personalities of uncertain social origins into fashionable prominence."³³³ Lady Violet Greville complained that those of true aristocratic birth could be ignored while those of indiscriminate background were "suddenly raised to the pinnacle of fashion... [their] toilet appears in every Society paper."³³⁴ By the end of the century the middle class audience now perpetuated etiquette not to aid their own social mobility, but as consumers of societal information, gossip and a celebrated lifestyle.

Such consumption helps to explain both the continued success of etiquette as a literary genre and as a regulating influence. Featherstone has suggested a "consumption logic" which points to the "socially structured ways in which goods are used to demarcate social relationships."³³⁵ Since the middle classes dominated the mass consumer culture of the nineteenth century, the very act of being the key consumers for social information, or for the commodity of etiquette, marked them out as separate from the very aristocratic groups they aspired to become. Even by the end of the century, when etiquette was less regulative, its audience paradoxically became standardised by its very act of demarcated consumption.

³³² Dames (2001), pp. 24-25.

³³³ Curtin (1987), p. 87.

³³⁴ Greville (1892), p. 65.

³³⁵ Featherstone (1990), p. 8.

As the market “became more intensely competitive material goods had to be rendered increasingly conspicuous and seductive in order to attract people’s attentions.”³³⁶ In doing so, mass consumerism applied the appearance over reality dichotomy of etiquette to advertising. Morgan discusses the similarities between persuasion and deception in advertising, and the repression of undesirable characteristics and mannerisms in behaviour, suggesting that the nineteenth century attributes of puffery were both social and commercial³³⁷ (and, ultimately, professional). Consequently, by the end of the century, the very notion of etiquette and its regulative characteristics had become absorbed within the very culture it had itself perpetuated. As disseminators of cultural information, etiquette books had controlled the potential social crisis of the early century and had ultimately helped to “rearrange conceptually a changed order of social relations.”³³⁸

4.7 Contribution to Knowledge

The examination of etiquette as a regulatory force in society, reacting to the crisis of social decadence and threat to established aristocratic control, has suggested some alternative views of the traditional Victorian information society and nineteenth century perceptions of information. Nineteenth century standardisation in the spheres of government, bureaucratic administration, business and communication were not occurring in isolation. There were developments in organised policing and prisons, which helped to reduce crime and maintain order, but it is evident that society was also regulating itself from the inside out. During the early decades of the century, control of the social crisis was manifested through legislation, violence and repression. Post-1830s, and the first publication of Day’s *Hints on etiquette*, this control was manifested through self-perpetuating etiquette and behavioural regulation. This poses some fascinating new questions about social control mechanisms during the nineteenth century.

³³⁶ Morgan (1991), p. 29.

³³⁷ Morgan (1991, 1994).

³³⁸ Arditi (1999), p. 28.

Looking back to the questions posed in Chapter Two, *Literature Review and Methodology*, my research on etiquette and behaviour has contributed greatly to our scholarly understanding of nineteenth century perceptions and understandings of information. This research is of value both to information science and information society erudition, but also to social history scholarship, something demonstrated by the fact that variations of this chapter have been presented at both the Social History Society Conference and the London LIS Research Group at City University.³³⁹

By taking a long-term view of courtesy and etiquette literature over the century, it is possible to identify certain chronological developments and trends, illustrating not only that perceptions of information and its manifestations could and did change over the century, but also that they were irrevocably tied up with bigger social and political developments. Such a social and cultural focus has introduced an alternative way of understanding the so-called Victorian information society, and certainly suggests that generally accepted theories, such as Beniger's notion of a control revolution, had social implications as well as the technological and infrastructural arguments with which they are more usually associated. Information management and dissemination was not something taking place only through means of technical production and communication. Social mechanisms and infrastructures were just as significant.

Through etiquette, nineteenth century cultural and social information was understood on several multifaceted and subtle levels. There was the knowledge presented on face value such as how to hold a dinner party, which books or clubs were the most popular, or the correct form for letters. Then there was the read-between-the-lines information that told you how to get ahead in society, how to network and meet useful acquaintances, or how to recognise those who were pretending to be something they were not. There was practical information such as domestic recipes, sanitation and hygiene advice, and tips on clothes to accentuate your best features. Finally, there was commercial information,

³³⁹ LON-LIS Research Group, City University, London, 12 September 2006, "*The Victorian information society*". Social History Society Conference, University of Exeter, 30 March – 1 April 2007, "*The role of behavioural etiquette as a social regulator during the nineteenth century.*"

which showed an awareness and responsiveness to socio-political developments such as Queen Victoria's accession and marriage or the lucrative market of gossip and celebrity. Therefore although nineteenth century perceptions of information were more subtle and understated than we understand them today, their social ubiquity and power were unmistakable.

Thus, this chapter has gone a significant way towards answering these research questions, although it has also raised some new ones for future study. The lack of much surviving evidence on how etiquette was used in practise does present a problem, but there is potentially enough existing material to allow a fascinating continuing exploration of the essential argument of this chapter, and of its relationship to our contemporary information society. The next chapter explores a more focused study of two Victorian periodicals, and their relationship to information as a cultural commodity in nineteenth century society.

Chapter 5

Perceptions of Information: Periodical Knowledge

5.1 Introduction

While chapters Three, *Individual Perceptions*, and Four, *Etiquette & Behaviour*, have been fairly broad in their scope, this chapter offers an extremely detailed and focused micro-study of two nineteenth century periodicals, *The Penny Magazine* and the *Illustrated London News* (hereafter the *ILN*) between May 1842 and May 1843.

Such a directed study offers another way of exploring nineteenth century perceptions of information. The chapter explicitly examines how these contemporary publications used information itself within their pages, and argues that in addition to being cultural disseminators of knowledge, they also used information as a commodity and commercial marketing tool, expressed ideas and knowledge through illustration, challenged the notion of accurate knowledge, and made self-conscious attempts to preserve knowledge as well as disseminate it.³⁴⁰

The research here is based upon an examination of every weekly issue of *The Penny Magazine* and the *Illustrated London News* for a period of one year, between Saturday, 14th May 1842 and Saturday, 13th May 1843. In addition, empirical secondary studies were consulted, as well as biographies and memoirs of the key people involved in the creation and running of these two periodicals.

Historians can have a tendency to pay little attention to periodicals in their own right; using them more often used as secondary evidence to support another argument.³⁴¹ One

³⁴⁰ This chapter goes only so far as to make some conclusions based upon the content and editorial attitude of these two journals. It does not deeply engage with archival material discussing audience reaction and effect, which would be a vast task in its own right and one for a future research project perhaps.

³⁴¹ Maidment (1990).

of the research aims discussed in Chapter Two, *Literature Review & Methodology* was to contribute a genuine interdisciplinary study that could be used and valued by both the historical and information science communities. This study of *The Penny Magazine* and the *ILN* will hopefully achieve this by contributing to our understanding of them in their own right, and the dynamic relationship that they had with information in the early 1840s.

By the early years of the 1840s, a growing capitalist culture and mass market ensured that periodical information was commercially viable and valuable, just as Reuter's News Agency would demonstrate in the 1850s. Periodicals were part of the new culture of popular entertainment and enjoyment shared by improved literacy and printing technology, just as were silver-fork novels, etiquette books, newspapers, museums, lectures and libraries. Moral, social and political sensibilities were an influence upon, and influenced by, the way information was disseminated and displayed in the two periodicals. Thus, "driven by remarkable changes in technology and science, knowledge was both inspirational and irresistible in terms of its potential for social and cultural transformations"³⁴² and periodicals reflected those aspects of the Victorian information society.

A recent historical study – the SciPer Project - by Geoffrey Cantor *et al* based on work at the Universities of Leeds and Sheffield, looked at the media used to disseminate scientific ideas to different audiences during the nineteenth century.³⁴³ They argued that contemporary "readers encountered a great quantity and an extensive variety of scientific, technical, and medical information in the pages of... general periodicals". The research

³⁴² Rauch (2001), p. 1.

³⁴³ Cantor *et al* (2003). The remit of the SciPer Project is "to identify and analyse the representation of science, technology and medicine, as well as the inter-penetration of science and literature, in the general periodical press in Britain between 1800 and 1900. Employing a highly interdisciplinary approach, it addresses not only the reception of scientific ideas in the general press, but also examines the creation of non-specialist forms of scientific discourse within a periodical format, and the ways in which they interact with the miscellany of other kinds of articles found in nineteenth-century periodicals." See <http://www.sciper.leeds.ac.uk/> for more details.

attempted to draw out some of these different types of information and catalogue them in one place.

This study is admirable and necessary, but it does not attempt to do anything more than systematically record the scientific articles. There is less effort to understand how or why these articles had been included in the first place, or how they demonstrated contemporary understandings of knowledge and its dissemination. The following chapter does not focus on scientific information, but it does apply the idea that the information content of the periodicals was “a dynamic exchange which involved readers, publishers, editors, and writers”, and that richness of periodicals as sources, allows “a very different perspective on public perceptions” in the nineteenth century.³⁴⁴

Periodicals have long been recognised as valuable “window[s] into the life and thought of the Victorian age.”³⁴⁵ Periodicals were often the first disseminators of new work and ideas of the age – literature, politics, science, business, religion, are all expressed throughout periodicals, spreading both ideas and practical techniques. According to North, given the ratio of population to periodicals, the nineteenth century was the only time where periodicals offered such a diverse and unique reflection of contemporary thought. The publishing technology and levels of literacy did not exist in the eighteenth century and, considering the vast population increases since the 1800s, the number of magazines per head published in England during the twentieth century did not outweigh the number of periodicals during the nineteenth.³⁴⁶ The nineteenth century was the peak of English popular periodical publishing.

There are limitations to using periodicals as historical evidence. They are vast in number, reaching thousands of issues and volumes, millions of pages and “within this framework

344 Canor et al (2003), pp. 163, 167.

345 Donn Vann et al (1978), p. ix.

346 North (1978), p. 5. Although, North was writing in 1978 and if you were now to include the rise of virtual publishing, blogs, websites, open-source projects and so on of the twenty-first century, rather than just hard copy, this may no longer be as true.

may be found every conceivable variety of opinion, debate, political posturing, and social commentary.”³⁴⁷ Thus any research subject using periodicals potentially becomes as abstract as perceptions and understandings of information itself. Authors were often anonymous, there is little scholarship on who actually formed the audiences of these periodicals, and there is only limited surviving evidence on why people bought such publications and the role they played in their everyday lives. “These periodicals show us what the Victorians wrote, not what they believed.”³⁴⁸

However, what was written in these periodicals was popular enough for people to buy them in very large numbers. Circulation figures for the *Illustrated London News* rose rapidly from 26,000 copies of its first issue, to 60,000 by the end of 1842 and to 300,000 by 1863. On its launch in 1826, *The Penny Magazine* reached an unprecedented 200,000 copies in its first week.³⁴⁹ As Bennett argues, while this does not allow us to know how people thought, it does suggest some ways in which fundamental needs and beliefs were satisfied.³⁵⁰ Thus, the qualitative content, the information that was chosen to be disseminated and to be preserved is of real significance.

It is impossible to avoid modern values when evaluating what is and what is not significant, since “these opinions are always subject to fashion, to personal prejudice, to the limitations of our knowledge.”³⁵¹ However, by taking such a focused micro-study of two periodicals this subjectivity can be minimized. The SciPer project selected material on the basis of how “it was conceived in its original historical context”³⁵² and the same criterion has been applied here. Such a qualitative assessment of the content and subject matter of these two periodicals should ensure that, as much as possible, the discussion is contextualised rather than anachronistic.

³⁴⁷ Donn Vann *et al* (1978), p. x.

³⁴⁸ Hamlin (2005), p. 637.

³⁴⁹ Hibbert (1975), p. 13. See also the *Dictionary of National Biography* entry for Herbert Ingram (Vol. 29, p. 13).

³⁵⁰ Bennett (1982), p. 225.

³⁵¹ North (1978), p. 18.

³⁵² Cantor *et al* (2003), p. 165.

5.2 *The Penny Magazine* and the *Illustrated London News*

The first edition of the *Illustrated London News* was published on 14th May 1842 (and continues today as a monthly periodical). *The Penny Magazine* was first published in 1826 and continued under its original patronage of the Society of the Diffusion of Useful Knowledge (SDUK) until December 1845 (although it did continue to be printed by Charles Knight for several months into 1846). The SDUK's aim in the publication of *The Penny Magazine* was to provide cheap and crucially, useful, literature through "the imparting useful information to all classes of the community."³⁵³ Originally published in the 1820s at a time of great social distress, the magazine deliberately avoided coverage or opinion of anything of a political or controversial nature, or anything which could be deemed 'news', so as to avoid the stamp duty which would make it more expensive and price it out of the reach of the general audience at which it was aimed.

By the early 1840s, printing and distribution technology had developed, and there was a gap in the market for something that capitalized on this new environment and middle class family audience. Herbert Ingram and Henry Vizetelly founded the *Illustrated London News* on this basis in May 1842 (it was originally conceived as an illustrated criminal and police record, but Vizetelly convinced Ingram that an illustrated *news* paper would work better). The *ILN* did not attempt to educate, as did *The Penny Magazine*; its emphasis was based upon the principle of entertainment and profit in a developing capitalist and consumer market.

With such a large selection of Victorian periodicals to choose from, why select these two? One might equally ask, why not? Briggs' assertion that patterns and perceptions can be traced through any individual, each as relevant as the other, can also be applied to periodical literature given its scale and scope.³⁵⁴ Despite this, there are some positive factors in favour of *The Penny Magazine* and the *Illustrated London News* that made them particularly relevant to this study.

³⁵³ *A prospectus* (1829), p. 1. For more on the SDUK see Bennett (1982, 1984); and, Gray (2003).

³⁵⁴ Briggs (1985), p. xvi. See also Chapter Three, *Individual Perceptions*, p. 52.

Both were immensely popular at their launch, outselling their rival publications in huge numbers. Both were published weekly rather than monthly, making them more accurate reflections of the contemporary public interest. Both used informative illustrations for the first time as a key selling point. Both took either 'useful information' or 'informative news' as their central focus. Since they overlapped each other between May 1842 and June 1846, it allows for a unique and direct comparison between the *ILN*, which represented new audience demands and expectations, and *The Penny Magazine*, which was beginning to decline in popularity. Also, unlike many of the other newspapers and periodicals of the time, *The Penny* and the *ILN* attempted to be non-party political. Of course, there was always subjectivity from the editors in the stories and images they chose to print, but neither had a stated political agenda.

This combination makes them a fascinating grouping to study in detail. In the fifty-two weekly editions (plus numerous supplements) published by each between May 1842 and May 1843 these periodicals applied information and knowledge in much more subtle ways than has previously been examined. They understood it as a commodity and commercial marketing tool; they used visual information or 'informative art'; they challenged ideas of authenticity of knowledge; and, they made confident and direct attempts to preserve themselves as part of the historical record, through the popular rationalisation of cultural knowledge. The remainder of the chapter examines each of these arguments.

5.3 Commercial information: a cultural commodity

Previous chapters have suggested that nineteenth century society did not just place a commercial value upon business information, but also on cultural and socio-political forms of knowledge, such as Julius Reuters' news agency and the medium of etiquette books. Information was perceived as both a cultural *and* commercial commodity. *The Penny Magazine* and the *Illustrated London News* were cultural products, but also essentially moneymaking ones based upon the sale of useful knowledge. Techniques

were employed to use information and knowledge as marketing tools for the publications themselves (thus facilitating the continued dissemination and sale of knowledge).

The most frequently used of these techniques was self-promotion and self-referencing. In each issue of *The Penny Magazine* there were a mixture of articles unique to that publication, but also a selection of pieces abstracted from other sources. For the twelve months studied, the SDUK or their publisher Charles Knight published 20.8% of items where publishers can be identified. The remaining 79.2% was made up of nine different publishers, and only one of these managed to equal the SDUK's number of citations.³⁵⁵ These short referenced abstracts allowed readers a taster of other books and publications, weighted in favour of items by *The Penny's* own publishers. Within the main articles there are also frequent citations and references from *The Penny Cyclopaedia* and other SDUK publications. The *ILN* also used the method of abstracting from other sources each week, but, in its case, the sources were other newspapers or government reports, rather than other products from its proprietors and publishers.

The *ILN* had its own methods of self-promotion and puffery to help increase its sales. Henry Vizetelly, publisher and engraver, wrote in his autobiography about one instance where "eight or ten thousand copies of a particular number, with engravings of the installation of a new Archbishop of Canterbury, were sent to all the Church of England parsons in the kingdom, a bold step, which was attended by immediate and satisfactory results."³⁵⁶ Like Henry Colburn's silver fork-novels of the 1820s and 1830s, every issue of the paper was full of examples of puffery by the editors, which had commercial implications:

As the circulation of this weekly journal is only surpassed by that of one newspaper in England [*The Times*], advertisers will see the importance of appearing in its columns.³⁵⁷

³⁵⁵ See Appendix One, p. 277.

³⁵⁶ Vizetelly (1893), p. 239.

³⁵⁷ *ILN*, No. 2, Vol. I, May 21st, 1842, p. 22.

Probably, in the whole annals of Newspaper History, the triumphant success of 'THE ILLUSTRATED LONDON NEWS' is without a parallel.³⁵⁸

'News' will be found to be a most invaluable medium for Advertisers... An additional attraction... [is] Illustrations being introduced of the objects advertised.³⁵⁹

This was reinforced visually, with engravings representing "a Saturday scene in our publishing office... a pressure of demand which steam could not follow" (see fig. 4, p. 135).³⁶⁰ The cost of the paper was only six pence, yet at a price of five shillings for five lines of advertisement text and nine pence for each subsequent line, the sale of information was indeed lucrative for the proprietors of the *ILN*. According to the *London Journal*, by 1845 the *ILN* was making a net profit of £16,000 per annum, mainly from advertising (around £1.2 million in today's money).³⁶¹ A regular feature was also "opinions of the press" which featured glowing reviews of the information and visual content of the *ILN* from its rivals and peers. Since *The Penny Magazine* did not feature a direct commentary or editorial voice on its contents, its self-promotion could not be as explicit as the *ILN*.

As part of the new mass journalism emerging in the 1840s, the *ILN* "actively sustained and participated in the discursive production of knowledge."³⁶² This "discursive production" could also be manifested by making readers producers of knowledge as well as its consumers, through the inclusion of letters columns³⁶³ and reader submissions to

³⁵⁸ *ILN*, No. 3, Vol. I, May 29th, 1842, p. 48.

³⁵⁹ *ILN*, No. 8, Vol. I, July 2nd, 1842, p. 127.

³⁶⁰ *ILN*, No. 46, Vol. II, March 25th, 1843, p. 218.

³⁶¹ *London Journal*, i, 1845, p. 328. Conversion figure based on 2005 values and calculated using the Economic History EH.net service.

³⁶² Leps (1992), p. 115.

³⁶³ Hamlin (2005), p. 638.



Figure 4: "Publishing-Office of the 'Illustrated London News'." *Illustrated London News*, No. 47, 25th March, 1843, p. 218.

the content of the periodicals. This was a dominant feature of the *ILN* from the start. "Correspondence" columns were a regular part of the paper from its second issue and although only the editorial responses were published, letters were clearly encouraged. Responses ranged from the negative "*it is impracticable*" to the more positive:

*As far as is possible we have attended to the suggestion of our friend.*³⁶⁴

While "it may well be that those who answered readers' letters occasionally filled space with made-up replies to non-existent queries,"³⁶⁵ the sheer volume of letters that were

³⁶⁴ *ILN*, No. 23, Vol. I, October 15th, 1842, p. 358; *ILN*, No. 2, Vol. I, May 21st, 1842, p. 22.

³⁶⁵ Anderson (1992), pp. 67-68.

constantly referred to by the editors of the *ILN* implied the dual role of readers as consumers and producers of knowledge. Some letters “remain unanswered from mere want of time to attend to them”, while the closing issue for 1842 boasted that the paper had received letters from the working poor, the middle classes, nobility and that even Buckingham Palace had taken copies of the *ILN*.³⁶⁶ Although *The Penny Magazine* did not acknowledge letters in print, the papers held in the SDUK archives show the Society did correspond privately with its readers.³⁶⁷

Although not a regular occurrence, a sketch of the eruption of Mount Etna in 1843 was published in the *ILN* after being “forwarded to us by an amateur contributor, who was for several nights a delighted witness of this magnificent and imposing spectacle”.³⁶⁸ The artist’s name was not given, so there is no way of confirming whether this was truly sent in by an ordinary reader, but the implication is that consumers of knowledge could also become producers in a dynamic exchange of information between the *ILN* and its audience. There is evidence that these audience contributions were not infrequent.³⁶⁹ *The Penny Magazine*, under less pressure to report ‘news’ events, tended to use engravings of classical images owned by its intimate group of SDUK patrons rather than depictions by its readers (see fig, 5, p. 137), as shown by Janet Percival.³⁷⁰

As an aside, it is interesting to consider this in the light of modern journalistic claims that the news is now made by the people rather than the media – videos made on mobiles and text photographs on the scene are often broadcast by national news channels. This idea of dynamic news is not as new as the media would like us to think – its origins can certainly be found in the mid-nineteenth century.

³⁶⁶ *ILN*, No. 2, Vol. I, May 21st, 1842, p. 22; *ILN*, No. 34, Vol. I, December 31st, 1842, p. 529.

³⁶⁷ Percival (1978), p. 6; Anderson (1992), p. 66.

³⁶⁸ *ILN*, No. 37, Vol. II, January 14th, 1843, p. 32.

³⁶⁹ *ILN*, 27th April, 1844, p. 120; *ILN*, 16th August, 1845, pp. 104-05.

³⁷⁰ Percival (1978).

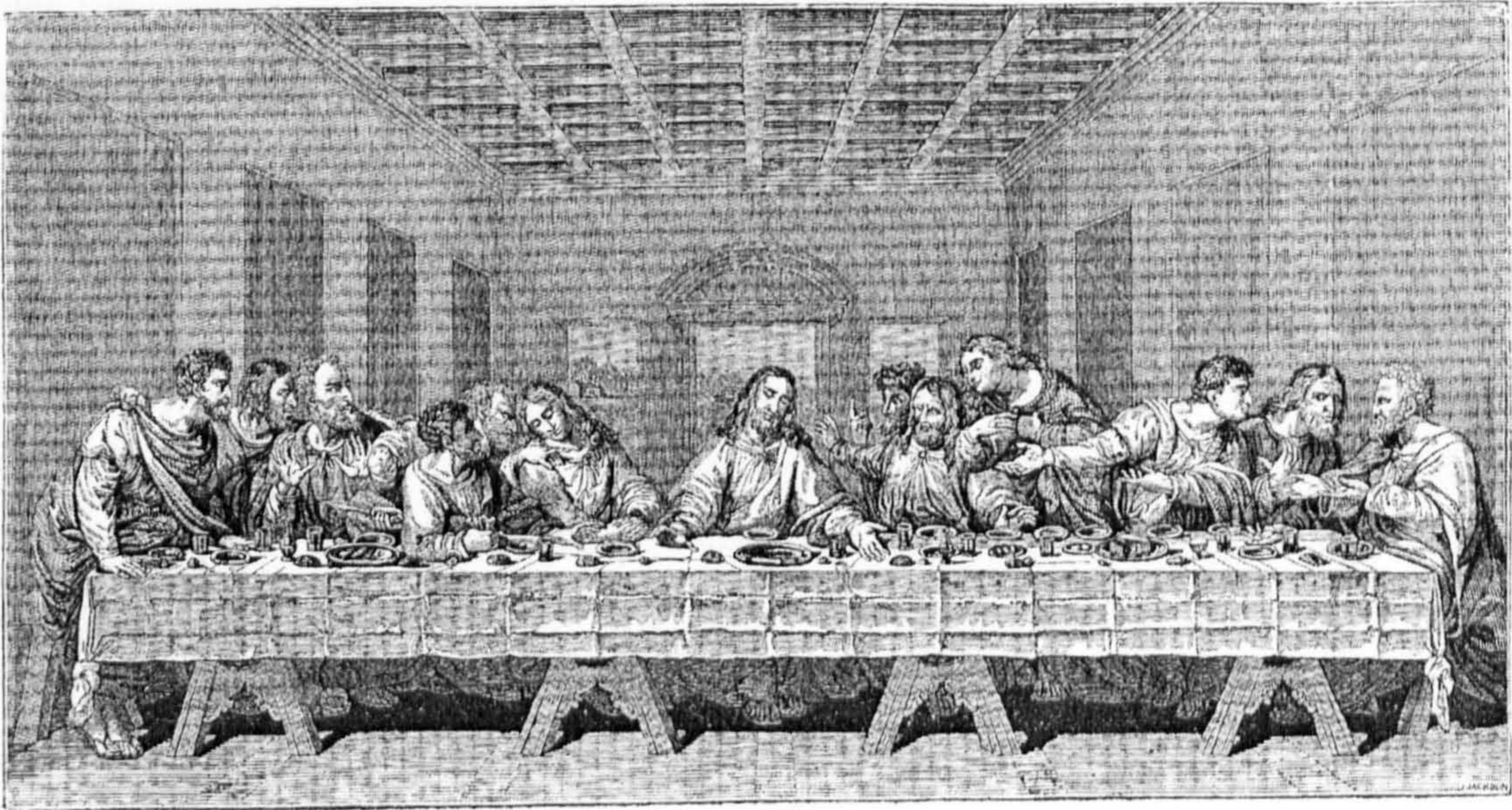


Figure 5: “The Last Supper”. Engraved by J. Jackson, from the Print by Raphael Morghen – after Leonardo da Vinci. *The Penny Magazine*, Vol. 3, 1834, p. 93.

Reproduced by kind permission of The British Library.

Both periodicals encouraged readers to continue to buy its next issue by introducing information ‘hooks’ throughout the publications. For *The Penny Magazine* this was mainly done through serialising its articles, so that an item might be split into four or five parts across a number of issues. The chronicles of the medieval historian Jean Froissart were spread across eleven issues continuing outside the period examined here.³⁷¹ An article on “Rivers, Geographically Considered” was stretched over five issues³⁷² and one on “The Lives of Remarkable Painters”, across six.³⁷³ This was a technique often employed by Victorian journals in the publication of sensation fiction to keep the audience on a cliffhanger to come back for more. Initially the *ILN* did not use serialisation of its articles, but it rapidly began to do so, also introducing regular columns on “Popular Portraits”, “Theatrical Portraits”, “The Fashions”, and “Floriculture”,

³⁷¹ *PM*, Nos. 651, 653, 665, 670, 674, 676, 678, 681, 683, 686, 687.

³⁷² *PM*, Nos. 667, 669, 670, 671, 672.

³⁷³ *PM*, Nos. 694, 698, 702, 703, 706, 707.

alongside chess puzzles where the solution would be printed the following week (the first of their kind in the world³⁷⁴), and the promise of prints by revered artists, or information on popular topics “in our next issue”.

The Penny Magazine and the *ILN* used information as both a cultural and commercial commodity. Sensation information, serialisation, hooks, advertising, self-promotion and dynamic reader relationships, were all employed to maximise their value as knowledge products. Charles Knight was aware of this value, ensuring that he “prudently retained the right to publish a library edition... for his own profit”, also regaining copyrights of much of his work and republishing new editions.³⁷⁵ Likewise, the *ILN* regularly published praise from its peers and figures on its circulation success around the world. Text and illustration combined to make a powerful contribution to the commercial value of knowledge in the early 1840s.

5.4 Visual information: or, informative art?

For both periodicals, engravings were an important part of the cultural commodification of visual information. Illustration and prints had been commercial ventures since the sixteenth century and also satirical caricature in the traditions of William Hogarth, James Gillray and Thomas Rowlandson. *The Penny Magazine* and the *ILN* were the first periodicals to make classical images and fine art available alongside contemporary illustrations within popular publications, and also for the general public rather than for private collectors. The *ILN* even used its engravings as a form of self-promotion within its pages, such as the “Saturday scene in our publishing office”, or the back page of its first issue which showed a long procession of men wearing billboards advertising the *Illustrated London News*.³⁷⁶ The pictures “all combined under the aegis of a single, prevailing logic: the commodification of the *Illustrated London News*”.³⁷⁷ During initial

³⁷⁴ Grogg (1977), p. 97.

³⁷⁵ Gray (2003), p. 47.

³⁷⁶ *ILN*, No. 46, Vol. II, March 18th, 1843, p. 218; *ILN*, No. 1, Vol. I, May 14th, 1842, p. 16.

³⁷⁷ Sinnema (1998), p. 12.

talks with Herbert Ingram on the content and style of what was to become the *ILN*, illustrator Henry Vizetelly understood the commercial potential of such visual information:

The suggestion of a newspaper with every number of it more or less filled with engravings, came as a sort of revelation to me, and I at once realised the vast field it opened up... I made a great point of the Afghan and Chinese wars in which we were then engaged, and of the many 'telling' subjects these would furnish to the engraver. I referred too to the scenes of state ceremonial, the important political gatherings – the agitation against the corn laws was then at its height – and the crowd of general public events, including every class of popular amusement, which were equally susceptible of illustration; and pointed out the facilities which the recent discovery of daguerreotype gave for the publication of portraits of political and other celebrities.³⁷⁸

The *ILN* frequently used contemporary news events as the basis for dramatic pictures that often had little direct relation to the news being reported but which were visually striking. Engravings accompanying a report on the beginnings of the Irish potato blight showed “the state of desperation to which the poor of Galway have been reduced by the present calamitous of starvation”.³⁷⁹ Pictures of Chinese weaponry, soldiers and forts represented the wars in India and China.³⁸⁰ Northern manufacturing riots were graphically illustrated to show how they had “swept down the barriers of citizenship and order, converted the labourer into an anarchist, and assumed all the alarming features of systematic insurrection”.³⁸¹ The Queen’s tour of Scotland in September 1842 produced pages of visual details, accompanied with descriptions of “the brilliant scene... the gorgeous spectacle”.³⁸²

³⁷⁸ Vizetelly (1893), pp. 225-226.

³⁷⁹ *ILN*, No. 3, Vol. I, May 29th, 1842, p. 100.

³⁸⁰ See for example, *ILN*, Nos. 9, 23, 29 (Vol. I), and No. 37 (Vol. II).

³⁸¹ *ILN*, No. 15, Vol. I, August 20th, 1842, p. 225.

³⁸² *ILN*, No. 17, Vol. I, September 3rd, 1842, pp. 257-266.

The fear of the mob that Wellington and others had written about in the 1830s and the unattainable lifestyle of the nobility discussed by etiquette were now visualised in front of the reader's eyes, and fed the desire for sensation that was common to the early Victorian years of the 1840s.³⁸³ Sinnema argues that in periodicals, such as the *Illustrated London News* and *The Penny Magazine*, the image is just as much the commodity as the text. "Images and words... can best be understood as modes of representation, frequently at odds with one another, circulating within the logic of the commodity. Thus a picture... can offer an 'image' or type... which, like an object, becomes the thing desired by the reader."³⁸⁴

As Sinnema notes, by the early 1840s, visual and textual information were becoming linked in new ways through these periodicals. Like many etiquette books that united verbal and visual descriptions of how to carve or how to dance,³⁸⁵ *The Penny Magazine* and the *ILN* shared a real visualness, or descriptiveness, of language, alongside their illustrations:

We pursue the course of the walk which leads along wildernesses of knotted trunks and gnarled overhanging boughs...[then] we see on that one, over the line of low laurels with their glossy leaves glittering so brightly in the sun, a beautiful open country, suddenly revealed, stretching far below and away, studded with a thousand interesting features.³⁸⁶

The sun shone upon the brilliant scene with an eastern splendour, the sky was unclouded, and the 'flaunting braverie' of the decorated ships, the rigging and yards of which were completely enveloped in a gaudy clothing of bunting,

³⁸³ Diamond (2003).

³⁸⁴ Sinnema (1998), p. 40.

³⁸⁵ See Chapter Seven, *Bringing it all Together*, pp. 222-225.

³⁸⁶ *PM*, No. 678, Vol. XI, October 29th, 1842, p. 422.

‘looking like some gay creatures of the clement, that in the colours of the rainbow live’, rendered the royal progress a most joyous and gorgeous spectacle.³⁸⁷

One possible reason for the visualness of language is “to compensate for the story’s lack of literal, pictorial illustrations,”³⁸⁸ although in some cases such language accompanied visual depictions. In the examples above, the description of Moor Park in *The Penny Magazine* has one vista of a garden to accompany almost four pages of detailed visual language. The *ILN*’s article on Queen Victoria’s tour of Scotland does have accompanying pictures that are promoted as being from their correspondent on the scene, forcefully uniting text and illustration.

As Mike Esbester has shown, railway guidebooks between 1830-1860 offered a similar unity of visual and verbal information by combining information on train fares and timetables with examples of how to behave on a journey and the experience of travelling itself.³⁸⁹ He argues that the faster speeds and new forms of motion in steam travel induced “psychological uncertainty, requiring explanation and reassurance.”³⁹⁰ Thus by explaining the vistas that could be seen by the traveller as they passed them on the train, the ambiguity of new technology could be matched by the certainty of image and explanation. This seems an interesting link between the worlds of etiquette literature and control and that of the *ILN* and *The Penny Magazine* in combining image and text, and in manifesting themselves as items of reference and preservation.

The best examples of the united force of visual and verbal information in *The Penny Magazine* and the *Illustrated London News* were those articles that depicted and explained scientific processes (using ‘science’ in the broadest sense to include botany, natural history, and geographic and topographic processes). “For the Victorians, the wood engraving was a medium of *exposition* of technical explanation of an increasingly

³⁸⁷ *ILN*, No. 17, Vol. I, September 3rd, 1842, p. 259.

³⁸⁸ Sinnema (1998), p. 166.

³⁸⁹ Esbester (2005).

³⁹⁰ Esbester (2005), p. 7.

technological society”. These periodicals “prominently serialised descriptions of technological processes which were explained both verbally and visually. The visual explanation of technical process became a staple of illustrated journalism.”³⁹¹

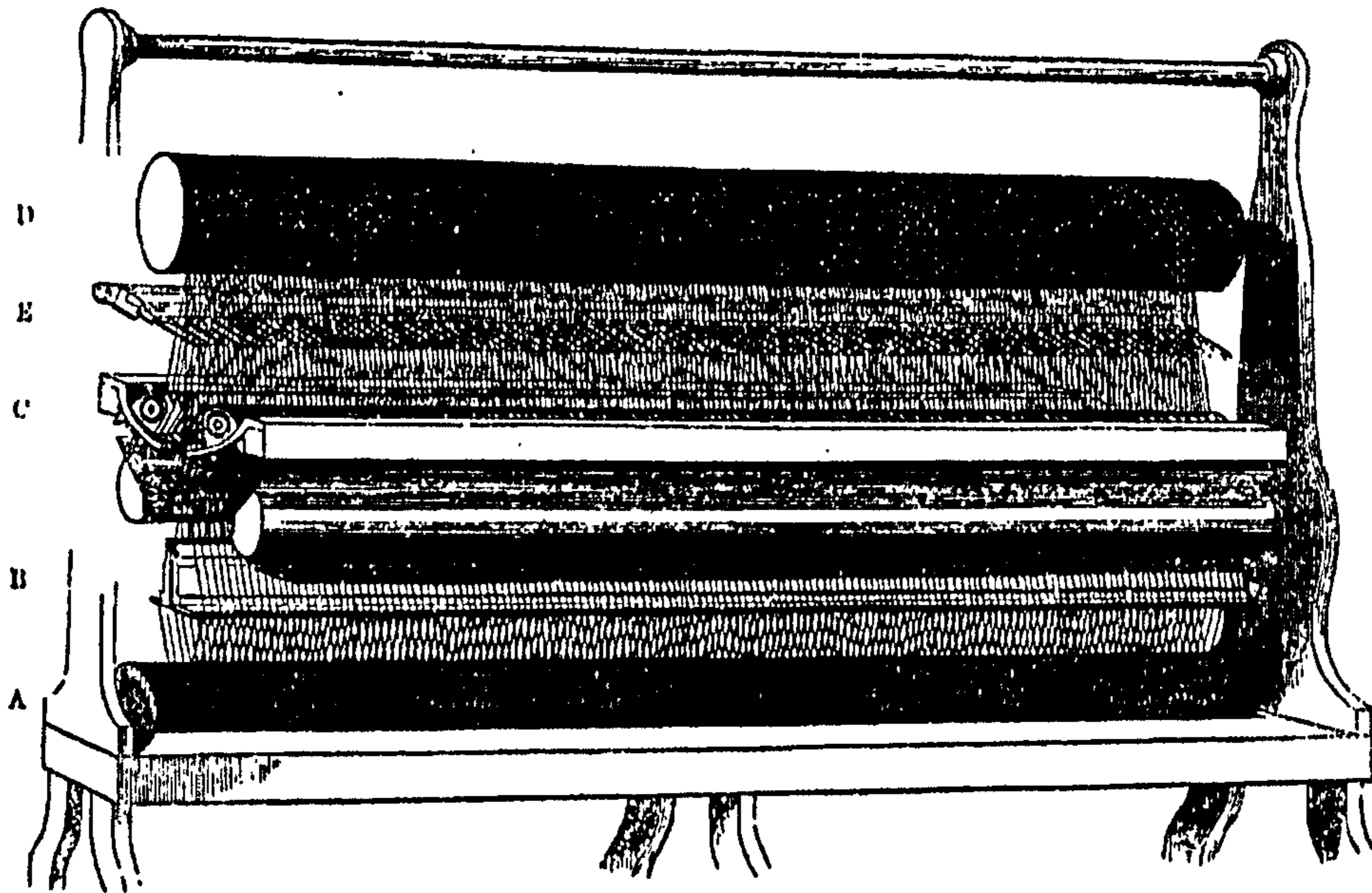
Such combinations of informative text and image appear throughout *The Penny Magazine* and, to a much lesser extent, the *ILN* – although augmenting as the paper developed. At the end of each month, *The Penny* published a supplement which focused on a particular manufacturing industry; each supplement was full of technical drawings and diagrams illustrating how various pieces of machinery worked, accompanied by detailed text explaining the illustrations. Topics ranged from a leather-splitting machine to brewing tools for vinegar and wine and lace-making machines (see fig. 6, p. 143).³⁹² Similar diagrams can be found in the *ILN* alongside articles on the working of the newly invented composing and distributing machines, or the usage of interlocking wooden pavement blocks.³⁹³ These diagrammatic images and illustrations were very similar in style to those employed by etiquette books to demonstrate how to carve or how to dance (see figs. 7 and 8, pp. 144, 145).³⁹⁴

³⁹¹ Maidment (2001), p. 145.

³⁹² *PM*, No. 652, Vol. XI, May Supplement, 1842, p. 214; *PM*, No. 679, Vol. XI, October Supplement, 1842; *PM*, No. 705, Vol. XII, March Supplement, 1843, p. 117..

³⁹³ *ILN*, No. 26, Vol. I, November 5th, 1842, p. 413; *ILN*, No. 38, Vol. II, January 21st, 1843, p. 42.

³⁹⁴ See Chapter Seven, *Bringing it all Together*, pp. 222-225.



Essential parts of the Bobbin-net Machine.]

(The warp, ascending from the beam A, passes through small holes in a guide-bar B, and thence to the point C, where the bobbins in their respective combs, driven by the ledges on the two bars beneath, traverse the warp to and fro, and interlace the threads as shown at D; the points E assisting to maintain the forms of the meshes.)

Figure 6: "Essential parts of the Bobbin-net Machine" - *The Penny Magazine*, March Supplement, 1843, p. 117. Note how each part of the machine is lettered to correspond with the text:

"The warp, ascending from the beam A, passes through two small holes in guide-bar B, and thence to point C, where the bobbins in their respective combs, driven by the ledges on the two bars beneath, traverse the warp to and fro, and interlace the threads as shown at D; the points E assisting to maintain the forms of the meshes."



THE COMPOSING MACHINE.

a are the keys, on which the chief compositor performs, each key answering a particular letter, which is engraved upon a small ivory button, fixed above each key.

b. Rack-frames, consisting of a series of vertical rails, by which compartments are formed (one for a's, one for b's, and so on), into which the letters are placed, as they are lifted from the distributing machine (afterwards described).

c. A receiver, to which all the types are conveyed, and in which the line is formed into words and sentences.

d. A justifying-stick, into which each line, when complete, is removed from the receiver c, for the purpose of being read over and justified by an assistant-compositor.

e. A galley, into which the assistant-compositor causes each line to slide down from the justifying-stick, after it has been justified, for the purpose of being spaced out.

f. A counting apparatus, by which the chief compositor is informed when each line is completed. This apparatus consists of a dial-plate and two hands. The plate is divided into inches and eighths of an inch. One of the hands is moveable, and must be placed at starting upon one of the marks, indicating the length of the lines, or width of the page to be composed. The other hand is so connected with the key movements, that it advances a distance equal to the thickness of each type composed, so that when it comes immediately above the other, that gives notice of the line being complete, when it is instantly removed by the compositor, and another begun. There is also a hammer, which strikes a small bell, as a warning to the compositor, a moment or two before each line is completed.

Figure 7: "The Composing Machine" - Illustrated London News, 5th November, 1842, p. 413.

Note how each part of the machine is lettered to correspond with the text:

- "a. are the keys, on which the chief compositor performs, each key answering a particular letter, which is engraved upon a small ivory button, fixed above each key.
- b. Rack-frames, consisting of a series of vertical rails, by which compartments are formed (one for a's, one for b's, and so on), into which the letters are placed, as they are lifted from the distributing machine (afterwards described)...."



Figure 8: Frontspiece reference plate in Wilson (1816), *A description of the correct method of waltzing*. Note how each figured position is numbered to correspond with the text:

“The feet in front are passed forward into the fourth position, as in fig. 2. on which the body is rested or supported, the feet behind in the fourth position, pointed as much as possible, with the knees perfectly straight, and resting in that position the time of two-thirds of a bar in Music, constitutes the First of the Four Steps.”³⁹⁵

The reader was also encouraged to become a producer of knowledge by the endorsement of direct observation which “was raised to a scientific level” in some articles.³⁹⁶ An article on the willow tree in *The Penny Magazine* suggested that:

³⁹⁵ Wilson (1816), pp. 63-64.

³⁹⁶ Bennett (1984), p. 134.

A whole life of observation may be devoted to a single genus of trees, in which Nature displays a versatility that refuses to be confined by the scientific systems of the naturalist.³⁹⁷

Another discussed the pruning of trees, which “will require much observation and recorded experience”.³⁹⁸ This was a process that in some cases, as Meadows notes, had a direct effect upon the emergence of a new generation of professional men of science during the 1800s.³⁹⁹ Scientific knowledge was fundamental to the nineteenth century audience, as new inventions and processes captured the popular public interest.⁴⁰⁰

Indeed, a key purpose of the illustrations for *The Penny Magazine* and the *ILN* “was to capture the readers’ interest (and their pennies).”⁴⁰¹ This aspect of commercial success was particularly significant to publisher Charles Knight, after his own bankruptcy scares in 1825-26, 1835-36, and 1841-44.⁴⁰² In his history of the pictorial press, Mason Jackson observed that even before printing technology allowed regular images in *The Penny* and the *ILN*, the occasional instances when newspapers did publish pictures were of key events that would be of public interest and boost sales.⁴⁰³ On Admiral Nelson’s death in 1806, *The Times* published engravings of Nelson’s coffin and funeral carriage with numerical keys to explain the markings on the coffin (see fig. 9, p. 147).⁴⁰⁴ Following the Cato Street Conspiracy plot to assassinate the entire British cabinet in 1820, *The Observer* published a diagrammatic illustration of the stable where the conspirators met in Marylebone, with notes to mark the doors by which the officers entered to apprehend the plot.⁴⁰⁵

³⁹⁷ *PM*, No. 649, Vol. XI, May 14th, 1842, p. 186.

³⁹⁸ *PM*, No. 683, Vol. XI, November 26th, 1842, p. 459.

³⁹⁹ Meadows (2004).

⁴⁰⁰ Chew *et al* (1993); Terpening (1996) Cantor *et al* (2003).

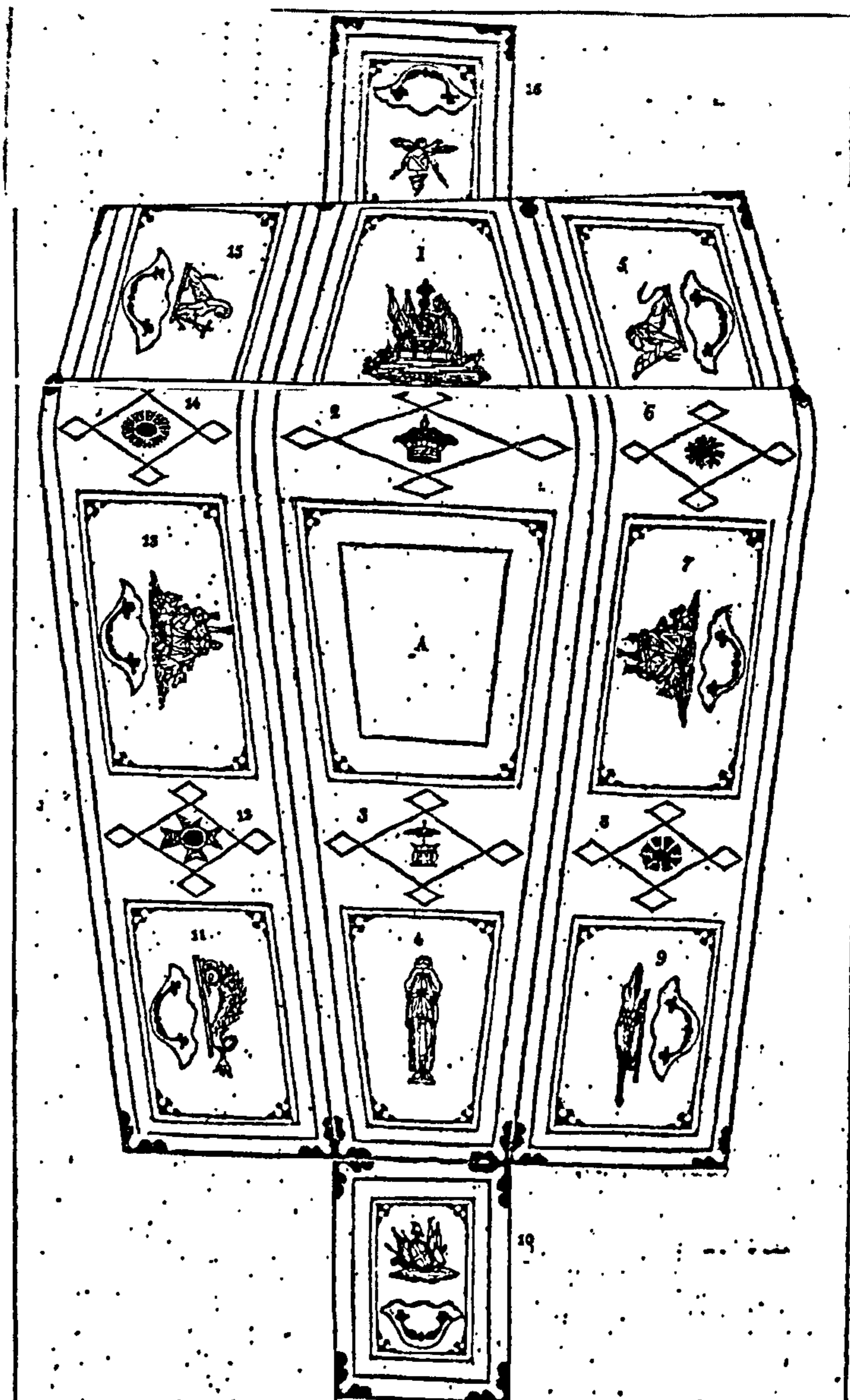
⁴⁰¹ Bennett (1984), pp. 131-132.

⁴⁰² Knight (1864), Vol. II; Gray (2003), p. 40.

⁴⁰³ Jackson (1885, pp. 219-276.

⁴⁰⁴ *The Times*, January 10th, 1806, p. 2.

⁴⁰⁵ *The Observer*, March 5th, 1820.



No. 1. The principal ornament of the head, is a correct copy of the emblematical Print published at ANTHONY'S Repository of Arts, to perpetuate the memory of Lord Admiral NELSON; it represents a monument supported by eagles, the emblems of Victory, with the portrait of the departed Hero in basso-relievo, surmounted by an urn containing his ashes, over which reclines the figure of Grief. At the base are seen the British Lion, with one of his paws laid on the Gallie Cock, Sphinxes, and other trophies, intended to commemorate the memorable Victory which the gallant Admiral obtained on the shores of Egypt, and to indicate that he might fairly claim the Sovereignty of the Ocean.

No. 2. Is a Viscount's Coronet, the reward of his services to his King and Country.

[Here follows the Deposition or Inscription Plate marked A.]
No. 3. Is the first Crest granted to him by his Majesty, after the battle of Cape St. Vincent, when his Lordship boarded and took the San Josef;—the motto is "Faith and Works."

No. 4. Is a weeping figure (a coat from the antique), wrapt up in drapery, &c. chaste and expressive, symbols of Grief.

No. 5. On the left hand side of the Coffin, next to the head, is the British Lion, with the Union Flag, the Supporters of England, as also that of Lord Nelson's Arms.

No. 6. The most Honourable Military Order of the Bath.

No. 7. Directly in the centre is a beautiful composition of Britannia and Neptune riding triumphant on the Ocean, drawn by Sen-leon, and led by Fame; while Neptune is pointing to a shield, which bears the motto "Vive le mortel."

No. 8. Is the Order of St. Ferdinand, which he received from the King of SPAIN, with its motto "Fide et Merito."

No. 9. Is a Crocodile, an attribute in consequence of the glorious Victory of the Nile.

No. 10. At the foot of the coffin a Naval Trophy.

No. 11. On the right-hand side, towards the foot, is a Dolphin, the noblest fish of the sea, and was formerly claimed by the Hair of France.

No. 12. The Order of St. Joachim, transmitted to him by the Emperor PAUL, as Grand Master of the Knights of Malta, "Jureis Amicus Amor."

No. 13. In the centre, on the left-hand, are again Britannia and Neptune riding triumphant on the Ocean, drawn by Sen-leon, &c. as on the opposite side.

No. 14. Is the Order of the Great Crescent, which was transmitted to the Noble Admiral by the Imperial SULTAN after the glorious Battle of the Nile.

No. 15. Is the Sphinx, the emblem of Egypt.

No. 16. At the head-end of the coffin are other Naval and Military Trophies, with the Landing's Arms on a Shield.

Figure 9: Part of *The Times*' coverage of the funeral of Admiral Nelson. His coffin is drawn as an elevated view with a numerical key to the inscriptions on each of the sides. *The Times*, January 10th, 1806, p. 2.

Reproduced by kind permission of The British Library.

The first issue of the *Illustrated London News* featured three pages dedicated to the coverage of a fancy dress ball at Buckingham Palace. The paper's launch was orchestrated so as to coincide with the coverage of the ball due to the high popular excitement it was expected to create.⁴⁰⁶ The idea that the pictures and visual information included could affect sales is similar to the business techniques that Reuter would later adopt: that the only information that really existed was that for which people would pay.

This first weekly issue of the *ILN* sold 26,000 copies priced at sixpence and was an immediate success. By the end of 1842, its circulation had risen to 60,000. At the same time, *The Times* was averaging 22,000 copies daily and *The Penny Magazine* 100,000 weekly copies. Coverage of the funeral of the Duke of Wellington in 1852 increased sales of the *ILN* to 150,000 and by 1855 the reproduction of photographs of the Crimean War, hyped by Florence Nightingale's nursing campaign, and the abolition of newspaper tax in that year, combined to give sales of 200,000. By 1863 they were 300,000 weekly.⁴⁰⁷

The engravings and visual information of *The Penny Magazine* were so unique on their launch that Vizetelly recalls how its penny prints used to be hawked on the pavement, since these were the "only cheap prints people then had an opportunity of purchasing."⁴⁰⁸ Since *The Penny Magazine* tended to reprint other works of the SDUK or fine art owned by its wealthy patrons, it included "the best pictures of the old masters... intermingled with scenes at home and abroad, with places of renown and illustrious men of all nations and every age."⁴⁰⁹ The connections of the Society also allowed access to the collections of the British Museum,⁴¹⁰ and more latterly its illustrations have been the subject of debate among cultural and art historians.⁴¹¹

⁴⁰⁶ Vizetelly (1893), p. 231.

⁴⁰⁷ Hibbert (1975), p. 13; Grogg (1977), p. 123. See also the *Dictionary of National Biography* entry for Herbert Ingram (Vol. 29, p. 13).

⁴⁰⁸ Vizetelly (1893), p. 88.

⁴⁰⁹ Jackson (1885), p. 279.

⁴¹⁰ Gray (2003), p. 49.

⁴¹¹ Fox (1977); Anderson (1991); Maidment (2001).

The Society's publisher, Charles Knight, sold large bound volumes of the magazine's illustrations, including engravings of pictures after Leonardo da Vinci and Reubens, which, at 14 shillings, was priced way out of reach of the working poor at which its weekly penny issue was aimed.⁴¹² While it is important not to trivialise these images as "a sort of baby-food mode of communication, pap for those whose minds could not digest real words, [as this] would be to misread the function of the visual image in emergent commercial culture,"⁴¹³ there is little doubt that as much information was conveyed through image as through text:

I have known a man, who couldn't read, buy a periodical what had an illustration, a little out of the common way perhaps, just that he might learn from some one, who *could* read, what it was all about.⁴¹⁴

Nineteenth century audiences, such as these who bought *The Penny Magazine* itself, were often barely literate, with illiteracy levels in 1845 as high as 33% of men and 49% of women.⁴¹⁵ For many perhaps, they may have been much better able to understand the icon, emblem and visual pun in engravings than they would lengthy text, and "thus it might be possible to see visual and graphic culture between 1790 and 1870 as a more potent means than the printed word of democratising social understanding."⁴¹⁶

Such democratisation through imagery had a similar paradoxical effect as etiquette on the creation of celebrity and the decline of reverential attitudes. Popular and widely disseminated engravings could bring people and places directly into the homes of the readers. As Vizetelly recollects, at one point the politician and author Benjamin Disraeli

⁴¹² *One hundred and fifty wood cuts* (1835).

⁴¹³ Porter (1988), pp. 188-189.

⁴¹⁴ Mayhew (1861-1862), Vol. I, p. 25. Henry Mayhew was a notable nineteenth century journalist who spent much of his life researching and reporting on the conditions of the Victorian poor.

⁴¹⁵ Picard (2005), p. 249.

⁴¹⁶ Maidment (2001), p. 2.

was caricatured almost weekly in *Punch* by the artist John Leech, who “had so familiarised everyone with his face and figure, that an aristocratic little damsel, on being presented to him, exclaimed, ‘I know you! I’ve seen you in *Punch*!’”⁴¹⁷ The son of the Duke of Wellington was less enthusiastic about this public/private dichotomy. On the death of his father in 1852 he angrily recorded his feelings about the *ILN*’s popular coverage of the funeral: “such a thing was formerly unheard of - and is an outrage.”⁴¹⁸

The regular columns in the *ILN* showing politicians of the day and popular actors brought these people - or an image of them - closer to the audience. *The Penny Magazine* did not feature contemporary individuals as the *ILN* did, but it did reproduce great works of art, overseas cultures and well-known individuals of the past. As with etiquette, there was a “gradual formation of a new category of public experience called *the celebrity*.”⁴¹⁹ Yet, as Sinnema notes, the more widely pictures and visual information were accessible and reproduced, the less reverential their original object became,⁴²⁰ whether that was a piece of art, an individual, or even a foreign war or domestic rioting.

5.5 Authentic knowledge

The images and engravings in *The Penny Magazine* and the *ILN* were promoted as being authentic depictions, and this accuracy was used commercially as one of the biggest marketing points to audiences. For *The Penny*, this accuracy was more about representing manufacturing methods, technology, flora and fauna, or geography, accurately so that they could impart “useful information to all classes of the community, particularly to such as are unable to avail themselves of experienced teachers, or may prefer learning by themselves”.⁴²¹ This autodidactic approach was more typical of the early nineteenth

⁴¹⁷ Vizetelly (1893), p. 304. Also see Grogg (1977), p. 51.

⁴¹⁸ Mackay (1887), Vol. II, pp. 34-38. See also the report of the funeral in *ILN*, 20th November, 1852, p. 427.

⁴¹⁹ Dames (2001), pp. 24-25.

⁴²⁰ Sinemma (1998), pp. 51, 81.

⁴²¹ *A prospectus* (1829), p. 1.

century attitude towards self-help and the education of the people. By the 1840s, when the *ILN* was launched, there had been a “generational swing in taste...The popular market wanted entertainment.”⁴²²

As a slight aside, Gray continues, “works of popular instruction were marginalized and used more as school textbooks.”⁴²³ This would support the argument of the previous chapter that the notion of etiquette developed in this period from personal lessons on how to behave and progress in society to family reference books and mediums of social and celebrity gossip. Compared to *The Penny Magazine*, the ethos of the illustrations in the *ILN* were thus less about self-improvement and more to do with middle class family entertainment. Accuracy and truth of information in pictorial representations was something in which both periodicals took pride.

The first issue of the *ILN* promised that:

The public will have henceforth under their glance, and within their grasp, the very form and presence of events as they transpire, in all their substantial reality, and with evidence visual as well as circumstantial... if the pen be ever led into fallacious argument, the pencil must at least be oracular with the spirit of truth.⁴²⁴

This suggested that not only were the illustrations an accurate representation of reality, but also that images would be drawn from real events by eye-witnesses “as they transpire”. Leps has suggested that it was not just a case of information *per se* becoming a new commodity during this period, but that specifically, it was “objective information – up-to-the-minute, full, worldwide, and above all true.”⁴²⁵ Sinnema agrees, arguing, “as a commodity, the news took as a precondition its anchorage in truth.”⁴²⁶

⁴²² Gray (2003), p. 56.

⁴²³ Gray (2003), p. 56.

⁴²⁴ *ILN*, No. 1, Vol. I, March 14th, 1842, p. 1.

⁴²⁵ Leps (1992), p. 96.

⁴²⁶ Sinnema (1998), p. 10.

While such accuracy was sold to the audience, the reality was that the most visually attractive and striking images were not necessarily the most newsworthy or ‘useful’ and, due to time pressures, illustrations were often drawn from the printed text of other publications. Vizetelly explained that for the *Illustrated London News*, the;

system pursued for the majority of engravings of current events – foreign, provincial, and even metropolitan when these transpired unexpectedly – was to scan the morning papers carefully, cut out such paragraphs as furnished good illustrations, and send them with the necessary boxwood blocks to the draughtsmen employed.⁴²⁷

The images were therefore an engraver’s interpretation of a written report that a third person had selected as having potential visual interest. In such cases the *ILN*’s illustrations could be three times removed from the original event. One issue of the *ILN* featured an engraving of the Throne Room at Holyrood, featuring the Queen and Prince Albert on one page, yet ten pages later admitted that the picture was of the room as it was when George IV visited, “the artist having made the only variation that is likely to transpire by the introduction of Her Majesty and Prince Albert,” rather than drawing from the actual event this time around.⁴²⁸ This was not unusual. On the launch of the *Illustrated London News*, Charles Knight wondered how “could artists and journalists so work concurrently that the news and the appropriate illustrations should both be fresh? How could such things be managed with any approach to fidelity of representation unless all the essential characteristics of a newspaper were sacrificed in the attempt to render it pictorial?”⁴²⁹ Even its co-creator, Vizetelly, recognised the misleading nature of the initial address of the *ILN*, observing that there was “not even a single authentic engraving in the opening number derived from an authentic source!”⁴³⁰

⁴²⁷ Vizetelly (1893), p. 232.

⁴²⁸ *ILN*, No. 17, Vol. I, September 3rd, 1842, pp. 262, 272.

⁴²⁹ Quoted in Jackson (1885), pp. 280-281. Originally from Knight (1864).

⁴³⁰ Vizetelly (1893), p. 237.

Just as the dichotomy of appearance over reality could be seen in etiquette and advertising, the *ILN* “seems to transform the *appearance* of reality into an objective fact.”⁴³¹ The reality and the representation of reality, both visual and textual, were not always the same, and information was often manipulated to fit the form of the periodical. To some extent this could be a two way process depending on who was considered the arbiter of ‘true’ information, although the notion that “newspaper knowledge was indeed true, in that it actively sustained and participated in the discursive production of knowledge and power, which generated the ‘truth’ of the time”⁴³² is to raise significant questions about using information for manipulation, propaganda and publicity.⁴³³

Whereas *The Penny Magazine* concentrated on the production of engraved versions of well-known works of art to elevate public tastes, the *ILN* set the tone for its engravings in the high moral ambitions of its editorials and thus everyday news events became ‘historical’. A pictorial record of this sort took on the sublime aims of high art, inspiring awe, terror, or drama, distorting or exaggerating the scale of reality.⁴³⁴ The *ILN* featured reports of accidents with graphical descriptions of the injuries (although in these cases, no images alongside them), such as a steamboat explosion in Virginia, where “some of those on board were blown high in the air... Others were crushed with the splintered timbers, others scalded with the steam, while those below the decks... were either suffocated by the steam, or drowned when the boat sunk”. Or, on a train accident in France, a man “has lost both his legs and both his arms, and remains a mere trunk with the head upon it”.⁴³⁵ This fed back into Victorian preoccupation with sensationalism, and popular dissemination of such visual information, which as Rodrick notes in her study of the *ILN* and the Chartist paper *The Northern Star*, was highly successful in selling copy.⁴³⁶

⁴³¹ Sinnema (1998), p. 30.

⁴³² Leps (1998), p. 115.

⁴³³ See Chapter Six, *Panic and Awareness*, pp. 189-199.

⁴³⁴ Dobraszczyk (2005).

⁴³⁵ *ILN*, No. 1, Vol. I, May 14th, 1842, p. 5; *ILN*, No. 2, Vol. I, May 21st, 1842, p. 20.

⁴³⁶ Rodrick (1996), pp. 1-2.

Once published, fiction could easily become fact. Speculative articles from abroad could be “telegraphed, and because they are printed with news as news, the writer’s remarks are invested by most minds with the importance due to a statement of facts... the reader often takes that for veiled information which is merely speculative.”⁴³⁷ The scientific descriptions and statistical details helped to make stories appear more accurate and authentic, since “the emphasis on scientific detail helped document the ‘truth’.”⁴³⁸ This is more evident in the *ILN*, which covered topics of contemporary news, although *The Penny Magazine* employed the same techniques. One article, under the title of “Curiosities of British Natural History. Moles” describes the creature in very exact terminology:

When we examine the osseous and muscular development of the mole, we find a perfect correspondence with its external characters and the perfection of its senses. The great development of the skeleton is anteriorly, namely the bones of the shoulders, arms and chest. The skull is depressed above, elongated, and pointed; and the snout, continued beyond the maxillary and navel bones, is supported by a little additional bone, produced by the ossification of the cartilage.⁴³⁹

The language and phraseology here are very exact, very scientific and very rational, the tone and style adding to the authority of the piece.

Terpening has argued that “from the fiction and from the journalism of the day, it is evident that many people became so excited by technology, and so optimistic in regard to its potential, that they began to invest faith even in false knowledge.”⁴⁴⁰ Terpening sees this as a criticism of periodicals such as *The Penny Magazine* and the *ILN*, but we cannot

⁴³⁷ Greenwood (1897), p. 714.

⁴³⁸ Rodrick (1996), p. 6.

⁴³⁹ *PM*, No. 697, Vol. XII, February 11th, 1843, p. 50.

⁴⁴⁰ Terpening (1996), no page number.

know how much readers believed what they read, or what was the impact of such use of information. It is all too easy to project modern values and assumptions on the validity of information disseminated by these publications.

Terpening has suggested that “satire such as that of Dickens suggests the danger of the popularization of knowledge for the masses in such large amounts. The result is akin to the state of people of the twentieth century in the ‘Information Age’. Although there is a good amount of valid information being gathered and discoveries being made, a lot of the knowledge that is understood by people at large is perverted or overblown, leading them to put their faith in falsehood.”⁴⁴¹ This is reflected in much of the content of the two periodicals. *The Penny Magazine* frequently filled up space on pages by including a two or three line excerpt from a text, and the *ILN* reported events that could not really be described as news or entertainment, but rather information for information’s sake (as Florence Nightingale and Winnie Seebohm abhorred). Topics included just a few lines on how salmon fishing in the Tees was now as productive as in the Tyne & Tweed; the fact that Midsummer Day is celebrated in Norway and Ireland as well as England; that peasants and Englishmen shoot fowl differently; and the prettiness of English wild flowers.⁴⁴²

As Campbell suggests, “there seems to have been no absolute line between superficial and profound knowledge.”⁴⁴³ For the Victorians, just as for us, information and knowledge were being used and manipulated in a complex series of ways to sell, to inform, and to represent a culturally fluid and dynamic information society.

⁴⁴¹ Terpening (1996), no page number.

⁴⁴² *ILN*, No. 17, Vol. I, September 3rd, 1842, p. 269; *ILN*, No. 7, Vol. I, June 25th, 1842, p. 101; *PM*, No. 686, Vol. XI, December 10th, 1842, p. 488; *PM*, No. 677, Vol. XI, October 22nd, 1842, p. 416.

⁴⁴³ Campbell (2000), p. 51.

5.6 Preservation of knowledge

There was a contemporary awareness of this dynamism; both periodicals embraced the idea of preserving knowledge by themselves becoming part of the process of preservation, in a conscious effort to become objects of reference and of the historical record. This is a more sophisticated argument than the oft-cited view that they were simply an illustrated record of the times. The growth of knowledge texts and knowledge institutions such as public libraries and museums, during the nineteenth century, has been much discussed elsewhere.⁴⁴⁴ A previous chapter examined the changing semantics of ‘information’ and how encyclopaedias and dictionaries developed more scientific and rigorous practises in the Victorian era.⁴⁴⁵ Both *The Penny Magazine* and the *ILN* contributed to and reflected the desire to see knowledge popularly preserved and referenced as well as popularly disseminated.

Each volume of *The Penny Magazine* had a subject index and each issue referenced itself against past issues. Both Knight and Brougham perceived it as a regular and serialised aid to didactic learning as well as a general reference source. One working man wrote to the SDUK that he had “been a subscriber to the Penny Magazine from the first copy to the last... it comprises the principal portion of my Library and over which I pass away many a midnight hour.”⁴⁴⁶ Encyclopaedia and dictionary definitions were regularly cited within its articles alongside scientific classifications and Latin terminology, giving a sense of both credence and reference (the citations were, more often than not, taken from other SDUK and Charles Knight publications, providing further commercial self-promotion).⁴⁴⁷ Some of the articles in *The Penny* were described as guides to be consulted at later stages,

⁴⁴⁴ Leavis (1939); Black (1997); Headrick (2000); Rauch (2001), pp. 1-46.

⁴⁴⁵ See Chapter 3 *Individual Perceptions*, pp. 52-55. Also, Weller & Bawden (2006), pp. 138-140.

⁴⁴⁶ Anderson (1992), p. 67. Originally from SDUK correspondence, University College Library - Letter from T.B. Clark to Thomas Coates, 15th November, 1842.

⁴⁴⁷ See for example, ‘The Willow’ in *PM*, No. 649, Vol. XI, May 14th, 1842, pp. 185-187; or, ‘Steam Communication with India’ in *PM*, No. 654, Vol. XI, June 11th, 1842, p. 225.

such as the Railway Rambles series which gave details of walks and historic houses and gardens that could be visited by families and couples using the new railway networks.

Meanwhile the *ILN* proudly proclaimed itself to preserve;

the life of the times – the signs of its taste and intelligence – its public monuments and public men – its festivals – institutions – amusements – discoveries – and the very reflection of the living manners and costumes...⁴⁴⁸

It continued that its contents would serve the future scholar in order to “teach him the truth about those that have gone before him.” A dedicatory sonnet in the preface to the first volume suggested that the *ILN* would “present a gift to take – to cherish and to use”, implying that the newspaper was not just for immediate entertainment, but also something practical to keep and to refer.⁴⁴⁹ It was “the illustrator of the history of the time”, which would give “life and vigour to the page of history.”⁴⁵⁰

The paper gave away “monthly wrappers” in which to bind issues, as well as “a title page and index” at the end of each year to organise and structure the information contained within its pages.⁴⁵¹ Illustrations of the Queen’s tour of the Highlands in 1842 were reprinted and issued in a protective and “beautiful Tartan wrapper.”⁴⁵² Newsagents were instructed to keep the paper crease free so it could be kept cleanly in monthly parts, and back issues could be ordered to complete reference sets.⁴⁵³ As with *The Penny Magazine* this had clear commercial undertones, but there remains self-awareness from the start that the paper was forming a record of the day, which “could be bound and installed on the library shelves as an authoritative historical reference for the generations to come.”⁴⁵⁴

⁴⁴⁸ *ILN*, Preface to Vol. I. (1842).

⁴⁴⁹ *ILN*, Preface to Vol. I. (1842).

⁴⁵⁰ *ILN*, No. 9, Vol. I, July 9th, 1842, p. 136; *ILN*, No. 34, Vol. I, December 31st, 1842, p. 529.

⁴⁵¹ *ILN*, No. 2, Vol. I, May 21st, 1842, p. 22.

⁴⁵² *ILN*, Vol. I, October 8th, 1842, p. 352.

⁴⁵³ *ILN*, No. 7, Vol. I, June 25th, 1842, p. 102. See also Grogg (1977), pp. 194-195.

⁴⁵⁴ McKendry (1994), p. 5.

The building-up of a collection of issues and volumes was often of paramount importance, with one working man, Christopher Thomson, claiming that he considered owning a set of the volumes as important as finding a job. Thomson gained the fundamentals of education in a Free School, after which he developed by his own determined efforts, succeeding in publishing his autobiography in 1847,⁴⁵⁵ an uncommon event for one of his social origins, so perhaps he is not typical of *The Penny Magazine* reader. Percival comments that the archives of the SDUK are full of correspondence from readers “who had to wait for all the parts and a separate title-page to be issued before they could get their sets bound up.”⁴⁵⁶ Although these were often letters of complaint about the delay, they do strongly suggest that people were actively reading and keeping editions as reference material.

The perception of these periodicals as works of reference also had social and moral implications, considering they were being published alongside the emerging etiquette genre. The introduction to one encyclopaedia suggested that one should “let useful *knowledge accompany* polite literature” to ensure reasoned and informed behaviour.⁴⁵⁷ Information of any kind became “a new kind of social and cultural currency... important rungs in the social-climbing ladder.”⁴⁵⁸

The *ILN* featured regular columns bringing “The Fashions” from Paris, marriages and mortality in “High Life”, and reviewed etiquette and domestic handbooks such as *The Domestic Dictionary and Housekeeper’s Manual*.⁴⁵⁹ At the same time, it could allow its readers a joke at insider Society knowledge:

⁴⁵⁵ Thomson (1847).

⁴⁵⁶ Percival (1978), p. 6.

⁴⁵⁷ Guy (1832), p. viii.

⁴⁵⁸ Rauch (2001), p. 2.

⁴⁵⁹ *ILN*, No. 34, Vol. I, Dec 31st, 1842, p. 554; for review see *ILN*, No. 2, Vol. I, May 21st, 1842, p. 28.

Two glances make a bow; two bows a how-d'ye-do; six how-d'ye do's, a conversation; four conversations, an acquaintance.⁴⁶⁰

This did not just apply to Society knowledge and social behaviour, but also social advancement in a much more pragmatic sense. Cheap literature such as *The Penny Magazine* could be collected and preserved as encyclopaedic works of reference, encouraging auto didacticism. The launch of the 'new series' of *The Penny* from 1841 was to include "a Miscellany of higher character than the first series... It was thenceforth to be chiefly a magazine of reading."⁴⁶¹

Articles on the geography and history of Afghanistan or China might not provide explicit commentary on the Government's foreign policy, but it did allow readers some sense of context and background, as well as showing an awareness of the significance of the issue. England was at war with Afghanistan between 1839 and 1842 and with China in the 'Opium War' of 1840-1843. In the period under study, the *ILN* regularly reported news coverage of the troops and military efforts, while *The Penny Magazine* concentrated on the geography and descriptions of Chinese and Afghan ports, cities, local people and customs and military history.

Both periodicals also saw individual issues cross-referenced with others, to create an end product that was more complexly interwoven with multiple subtle layers of information. An article in *The Penny Magazine* on the changing fashions of courtier clothing noted that the reader should:

See 'Penny Magazine,' vol. iii., p. 321, for an article on the History of Coaches; and vol. 1., p. 182, New Series, and vol. iv, p. 186, Old Series, for notices of travelling.⁴⁶²

⁴⁶⁰ *ILN*, No. 15, Vol. I, August 20th, 1842, p. 235.

⁴⁶¹ Knight (1864), vol. II, p. 322.

⁴⁶² *PM*, No. 664, Vol. XI, August 6th, 1842, p. 305.

Other pieces in the magazine had footnotes to explain particular terms used within the text.⁴⁶³ An article and illustration of the Monument in London was spread over three issues of the *ILN*, the second of them noting that “we last week gave a view of the Monument... At the special request of many of our subscribers, we this week give a view of the top of it, on a more enlarged scale”. The following week, even more detail was added to the referenced previous issues.⁴⁶⁴ The serialisation of articles in both periodicals also reinforced the cross-referencing, with items in one issue linking back to topics discussed in others and promising further information in future issues.

Such presentation of information created an encyclopaedic feel; knowledge was stored and disseminated, cross-referenced and indexed for the reader’s convenience. Just as domestic and individual information had been rationalised by etiquette, and personal information, such as that of the Newnham College girls by Eleanor Sidgwick, had been classified and catalogued, cultural knowledge and news were also ordered and synchronized by *The Penny Magazine* and the *Illustrated London News*. Bennett has discussed how nineteenth century periodicals were not under effective bibliographic control and thus much of the information in them was as lost to contemporaries as it now is to us.⁴⁶⁵ In many cases this is undoubtedly true, but by marketing themselves not just as *disseminators* of useful knowledge but also as *preservers* of it, *The Penny* and the *ILN* facilitated the emergent Victorian bibliographic processes that would emerge more fully with the growth of public libraries and classification systems from the 1870s.

While, as Bennett argues, retrospective index lists were “prepared after the fact...and thus suffers from the difficulties of a retrospective effort to collect information about an essentially transient phenomenon,”⁴⁶⁶ these two periodicals escape the severity of this judgement because they were cross-referencing and staking their claim as tools of

⁴⁶³ For example see *PM*, No. 665, Vol. XI, August 13th, 1842, p. 313; *PM*, No. 690, Vol. XI, December Supplement, 1842, p. 509; *PM*, No. 692, Vol. XII, January 14th, 1843, p. 13.

⁴⁶⁴ *ILN*, No. 17, Vol. I, September 3rd, 1842, p. 268.

⁴⁶⁵ Bennett (1978), p. 21.

⁴⁶⁶ Bennett (1978), p. 27.

reference whilst they were being published each week. In fact, Bennett continues that “these retrospective lists were developed in response to perceived needs” which sounds very much like a further complication of the crisis of control in the Victorian information society.⁴⁶⁷ Similarly, Beetham claims that periodicals are “read today and rubbish tomorrow, each number of a periodical becomes obsolete as soon as the next comes out.”⁴⁶⁸ However, in the case of *The Penny Magazine* and the *ILN*, they better preserved their physical selves, as well as the information contained within them, by their technique of cross-referencing and maintaining themselves as works of reference and not just of contemporary news.

5.7 Contribution to Knowledge

Periodicals were a chief form of discourse in the nineteenth century. They covered the political and social news of the day, popular figures, broad scientific knowledge and diagrams, illustrations, gossip and entertainment. *The Penny Magazine* and the *ILN* were among the most popular to a mass audience. Such a rich selection of information being dispersed each week to the Victorian public allows some new perspectives on how knowledge was utilised and received on a grass-roots level, as opposed to the more oft-considered large scale technologies and organisation of information in the nineteenth century, such as government and business processing, surveillance and office bureaucracy.⁴⁶⁹

Information history needs to examine more than just information in terms of its technological or organisational tools and processes. This doctoral research attempts throughout to examine how information was thought of and used in a social and cultural capacity, as a distinct move away from the traditions of the discipline. The research questions posed in Chapter Two represent this by asking if a social and cultural focus

⁴⁶⁷ See Chapter Four, *Etiquette & Behaviour*, pp. 90-126; Weller & Bawden, (2005).

⁴⁶⁸ Beetham (1990), p. 19.

⁴⁶⁹ See for example; Beniger (1986); Eastwood (1989); Martin Campbell-Kelly (1994); Black & Brunt (1999); Agar (2003); Higgs (2004); Weller & Bawden (2005).

could contribute alternative ways of thinking about the Victorian information society, and how a social and cultural view of information might relate to the existing literature on the organisational and technological Victorian information society.

This micro-study of *The Penny Magazine* and the *ILN* has introduced the idea that periodical knowledge was a dynamic and vibrant form of information exchange, disseminated and preserved among a popular audience. More than just 'knowledge texts', they embraced information itself, as a thing, to facilitate their sales and marketing. The audience was made both consumer and producer of knowledge, helping to democratise it in the process in a way that we have not seen so explicitly in previous chapters.

More than just textual knowledge, *The Penny* and the *ILN* both used illustration as a visual aid. Art became informative to a mass audience. Science was represented visually, but so were theatre, geography, art and individuals. This was more than simply advertising or reproducing great works of art; it created a powerful relationship between words and pictures, making visual information as much as a cultural commodity as the written word.

The credence of the information in *The Penny* and the *ILN* was supported by images alongside text. Indeed, the suggestion of having reporters on the scene recording events added credibility and weight to the whole piece. It was not just information *per se* that was becoming a cultural commodity, but accurate and objective information, supported by facts and visual documentation. Diagrammatic illustrations were used alongside text as they were in many etiquette books. Reality and the appearance of reality were not always the same, and despite proclamations to publish the truth, sensation, the sublime, and the pressures of economy often dominated.

Just as the dichotomy of appearance over reality could be seen in etiquette and advertising, the *ILN* "seems to transform the *appearance* of reality into an objective fact."⁴⁷⁰ The reality and the representation of reality, both visual and textual, were not

⁴⁷⁰ Sinnema (1998), p. 30.

always the same, and information was often manipulated to fit the form of the periodical. Scientific processes and minute detail were used to authenticate information, as were encyclopaedic and dictionary references and classical quotations or phraseology. The boundaries between profound and superficial knowledge were blurred during this period, with trivialities being as valued as the significant reportage of events. Perhaps this was a result of the emergence of a popular family audience, and the beginnings of its permeability.

Such allusions also formed part of the conscious efforts by *The Penny Magazine* and the *Illustrated London News* to preserve information as well as to disseminate it, and in doing so, preserve themselves as physical works of reference to be kept and used. Information had a didactic function to educate and improve social standing and understanding. Bibliography, cross-referencing, indexes, bindings and footnotes, contributed to the complex and interwoven network of knowledge that was becoming popularly available in the 1840s, and, more significantly, helped to make sense of it.

These periodicals irrevocably reflect aspects of the developing nineteenth century information society on a *social* and *cultural* level. Victorian perceptions of information, just as our own, were not created in isolation, nor were they concerned solely by the processes of technology and high-level information collection and dissemination. Information was as popular as everyday pursuits and experiences. As cultural artefacts of the day, *The Penny Magazine* and the *ILN* allow us a fascinating insight that has too often been overlooked. The following chapter moves away from such ephemeral sources as periodicals and explores information by focussing upon an actual event – the first attempt to build a Channel Tunnel between 1880 and 1883 – exploring *public* perceptions of the Tunnel to examine the ways in which information was disseminated and utilised.

Chapter 6

Perceptions of Information: Panic and Awareness

6.1 Introduction

So far in this research, information has been explored through the ephemeral sources of Victorian periodical literature and etiquette guides. This chapter focuses upon an actual event – the first attempt to build a Channel Tunnel between 1880 and 1883 – and examines the controversies and panics surrounding it. The chapter explores *public* perceptions of the Tunnel using a combination of publicly available source material from this period, to examine the ways in which information was disseminated and utilised. The perspective is largely English, although overseas opinion is touched upon. The reason for this is mainly due to the practicalities of accessing archival material, but it is also a deliberate choice to restrict the perceptions to English ones, in order to more easily compare and relate to previous chapters.

There were three official reports on the Channel Tunnel in this period. The first was Departmental (War Office, Admiralty and Board of Trade), created in 1881 to consider what defence steps the government should take with regard to the tunnel. The second was Military, presided over by Sir Archibald Alison in 1882 and which concluded in its 'Blue Book' of October that the Tunnel was not strategically secure. The final Joint Select Committee of both Houses of Parliament was commissioned in April 1883. Despite the chairman Lord Lansdowne stating that ultimately the evidence was in favour of the project, this final committee voted with an astonishingly close six votes to four against the Channel Tunnel in July 1883.⁴⁷¹

⁴⁷¹ *The Channel Tunnel* (1883); *Report from the Joint Select Committee* (1883); Corrigan (1971); Travis (1991). Railway companies introduced further private bills on the Channel Tunnel to Parliament in 1884, 1885, and 1886, although none were successful - Hunt (1994), p. 61.

Since many scholars have already examined these official reports,⁴⁷² they form only a small part of the source material for this chapter. The mass of public information and cultural debate provide a lesser studied, but potentially more fascinating, view of how Tunnel information was used and disseminated by all parties. It is this that is explored throughout the following pages.

The years between 1880 and 1883 provide a contained and intense focus for study. They saw an eruption of pamphlets, letters, newspaper reports, journal articles, lectures, novels and poems, all expressing opinions on the Tunnel. It is these sources that form the basis for this chapter, exploring how such a change of opinion came about in such a short time, and how the information expressed and disseminated regarding the Tunnel formed a key part of public awareness.

For this chapter, a selection of newspapers and periodicals between 1880-1883 were thoroughly examined. Between these years, every issue of *The Times* (whose reports were generally factual and relatively impartial), *The Spectator* (which had an anti-tunnel editorial stance), *The Nineteenth Century* (also anti-), and the *Illustrated London News* (whose editorial policy was allegedly pro-tunnel) were examined. Daniel Pick and Richard Rogers have both noted the pro-Tunnel position of the *ILN*, yet my own examination does not wholly support this view. This is discussed in more detail later.⁴⁷³

Popular pamphlets, verse and transcripts of public lectures were also consulted, as were the official documents and government reports of the Channel Tunnel progress and consultation, to a lesser extent. Since the focus of the research was on *public* perceptions and of information discussed in the public arena, there is intentionally less emphasis on source material from a private archival perspective. Although the Tunnel has origins dating from 1802, the only contemporary material consulted was from the 1880-1883 period. There has been so much secondary discussion of the early development of the

⁴⁷² Corrigan (1971); Wilson (1994); Gourvish (2006).

⁴⁷³ Pick (1994), p. 90, n. 2; Rogers (1995), pp. 366-367. See pp. 195-196 for my discussion of this position.

Channel Tunnel that as historian Terry Gourvish has commented, there are simply “no unexplored archives to trawl.”⁴⁷⁴

However, this does not mean that there are no new *perspectives* to explore. Although much has been written on the history of the Channel Tunnel, almost all of it focuses upon the technological and engineering feats of the Tunnel, or on the political progression of the Tunnel’s existence (from 1802 to the present day).⁴⁷⁵ This chapter examines the Channel Tunnel debates of 1880-1883 from a different angle, trying to understand the role of information through social and cultural documents and publications that discuss the Tunnel, rather than re-examining proposed construction plans, costs, legalities or engineering practicalities.

It is argued here that these cultural documents show much continuity with the ideas explored in previous chapters; of information as an advertising tool, of visual information vs. rational information (or of science vs. sensation), and of the ‘people’ and their relationship to Government. In addition to these themes, it is argued that the notion of what information should be publicly available during these debates was considerably different to that which governments believed appropriate for public consumption in the 1830s during the Reform Act agitations. In other words, while Wellington feared the “propagation of falsehoods” and “the ill-informed and mischievous” public in 1831,⁴⁷⁶ by 1882 *The Times* was arguing that information on the Channel Tunnel project “has been so much before the public that it was natural that the Government should be questioned as to their views or intentions.”⁴⁷⁷

⁴⁷⁴ Gourvish (2006), p. xiii.

⁴⁷⁵ A far from comprehensive selection of such contemporary texts includes; Crampton (1882); Hawkshaw (1882); *The Times*, 25th February, 1882, p. 5; Watkin (1882), pp. 9-19. Secondary material includes, Travis (1967); Beaver (1972); Bonavia (1987); Hunt (1994); and, Gourvish (2006).

⁴⁷⁶ Guedalla (1931), p. 369; Southampton University, Hartley Library – Wellington Pamphlet 1194/12, *A Letter to a Minister of State Respecting Taxes on Knowledge*, 2nd edition, 29 January 1831, London.

⁴⁷⁷ *The Times*, 15th February, 1882, p. 9.

One other theme, further developed in this chapter, is the notion of factual and fictional information being used alongside one another. As we have seen, the *ILN* used this technique during the early 1840s through its use of “faking it” with duplicated or doctored illustrations.⁴⁷⁸ Etiquette literature also demonstrated hazy distinctions between appearance and reality.⁴⁷⁹ The accounts of the Channel Tunnel debates demonstrate a development of this theme into the 1880s.

There appears to be a certain amount of fluidity between ‘official’ and ‘unofficial’ perspectives. The military objectors evoked cultural references and symbolic notions of England to argue their case. Poetry and prose adopted the language of the official reports and embedded it within its sensationalist imagery. The boundaries between fact and fiction were blurred as dramatic descriptions of invasion, rioting, or international politics were blended with actual events or people, producing a confused authenticity of detail.

As with previous chapters, the language of science and rationality is balanced with very visual information, creating juxtapositions in the way information was presented. The ideas of ‘the people’ and of the public disclosure of information are also recurrent and significant themes of the literature. The notion that the public should have a say, that they had a *right* to a say, and to be fully aware of all the information, is something that appears strongly in this period, but which has not been such a significant theme in previous chapters. By the 1880s, public awareness and the idea of a *right* to information had become quite distinctly defined. There remained some conflict between the people of the mass electorate and the literary and educated elites, but much of the tension of the 1830s debates had been resolved.

Finally, there is some exploration of information used as public relations and propaganda, something we have seen before through the advertising and puffery of etiquette books and *The Penny Magazine* and *ILN* of the 1840s.

⁴⁷⁸ Spielmann (1892), p. xii. Also see Chapter Five, *Periodicals and Knowledge*, pp. 150-155.

⁴⁷⁹ See Chapter Four, *Etiquette and Behaviour*, pp. 90-126.

6.2 Situating the Victorian Channel Tunnel Debate

Although the ideas mentioned above relate specifically to the early 1880s, discussion of some sort of permanent fixed link between England and France first emerged in 1802 and it is still topical today, given the new links being built at King's Cross and Stratford in London, making it "arguably the most controversial civil engineering project in contemporary British history".⁴⁸⁰ Between 1802 and 1987 there were 138 different Channel Tunnel proposals put forward in France and Britain and of these, only twelve made it before the British House of Commons and only one, in 1986, was passed.⁴⁸¹

In 1802 the French engineer Albert Mathieu proposed the first plan for a tunnel under the Channel, suggesting two tunnels, one from France and one from England, which would be connected by an artificial island. In his plan, horse drawn carts would pass through the tunnels and the island would provide necessary fresh air breaks. Both Napoleon Bonaparte and Charles James Fox, leader of the Whigs (the opposition party in Britain), supported the idea, but the resumption of war between the two countries in 1803 meant this initial idea was short lived.

The beginnings of geological investigations of the Channel seabed resumed tunnel plans in various forms during the 1830s, 1850s, and 1870s, but changing relations between Britain and the Continent – the July Revolutions in France of 1830, the Crimean War of 1854-56, and the Austro-Prussian and Franco-Prussian wars of 1866 and 1870 - stopped each attempt.⁴⁸² It is no coincidence perhaps that plans for a connecting tunnel to the Continent were scrapped at times when England felt herself threatened by overseas military and political events.

⁴⁸⁰ Rogers (1995), p. 364.

⁴⁸¹ Rogers (1995), p. 364. See also, Whiteside (1962), pp. 10-11.

⁴⁸² This is strongly argued by Moon (1968), pp. 1-17.

Much has been written on this early history and development of the Tunnel, but the focus of this chapter is 1880-1883. It was during these years when advances in technology made it possible for the first time to physically start digging a Tunnel.⁴⁸³

By 1880 the situation was such that the Liberal government under Gladstone was encouraging investment in the Tunnel as a “sound business and engineering proposition” and had even made direct contact with the French government to express their support for such a Tunnel.⁴⁸⁴ Two rival tunnelling companies existed, the Channel Tunnel Company, who had been granted permission to tunnel at St. Margaret’s Bay in 1875, and the South Eastern Railway Company under the ownership of Sir Edward Watkin, who was granted permission in 1881 to tunnel west of Dover at Abbots Cliff and Shakespeare Cliff. In the same year, Watkin floated a third company – the Submarine Continental Railway Company – which took over from the South Eastern. By 1882, Watkin’s company had tunnelled 2,026 yards (1.852 km) towards France from Shakespeare Cliff.⁴⁸⁵ By April 1882 the Board of Trade stopped all work on the Tunnel due to the public and military controversies. By the 1st July 1883 the works were finally closed down following the verdict of the final Parliamentary report.

6.3 Key contemporary arguments

In order to make sense of the mass of public information on the Channel Tunnel project between 1880-1883, it is important to understand the key arguments put forward by both those who supported and opposed the Tunnel, and to contextualise some of these opinions. As Daniel Pick has argued, the debates of the 1880s must be understood:

⁴⁸³ For more on this early history see Slater & Barnett (1958); Bonavia (1987); Wilson (1994); and, Gourvish (2006).

⁴⁸⁴ Slater & Barnett (1958), p. 23. See also, *Correspondence between the Governments...* (1875).

⁴⁸⁵ Slater & Barnett (1958), pp. 55, 57.

in relation to other social and cultural concerns at the time... The tunnel question was locked into wide defence debates, invasion fears and socio-political concerns...⁴⁸⁶

[The Tunnel] is a contribution to our understanding of the cultural anxieties of that specific age which also bears upon wider questions...⁴⁸⁷

One of the biggest contemporary arguments against the Tunnel was related to its strategic positioning. Sir Garnet Wolseley (adjutant-general to the forces) and the Duke of Cambridge (commander-in-chief of the army), both vehemently voiced their opinion on the defensive risks that would be created by a permanent link with the Continent. They particularly evoked the image of the protective 'silver streak' of the Channel; a natural defence of England.⁴⁸⁸ In an interview with *The Evening Standard*, Wolseley expressed his fears at length suggesting that the Tunnel could be seized by 20,000 Frenchmen overnight, who in turn could capture Dover and from there move inland and take control of London.⁴⁸⁹ Wolseley's interview was so influential that it prompted one Member of Parliament to write to every member of the legislature to ensure they were aware of the dangers.⁴⁹⁰

Others regarded these fears as ridiculous given that the Tunnel would be twenty miles long and only seven feet wide, preventing any sudden rush of men. Not least of these were Colonel Fredrick Beaumont, who had spent three years building the fortress of Dover, and who had helped design the excavating machine, in both French and English ends of the tunnel,⁴⁹¹ and Lieutenant-General Sir John Adye, the Surveyor General of the

⁴⁸⁶ Pick (1994), pp. 77, 79.

⁴⁸⁷ Pick (1994), p. 77.

⁴⁸⁸ The term was first used by Gladstone in an article in *The Edinburgh Review* in 1870.

⁴⁸⁹ *The Evening Standard*, 6th February, 1882, p. 2.

⁴⁹⁰ Berney (1882).

⁴⁹¹ The Beaumont Machine for excavation was named after the Colonel. See for example *ILN*, No. 2235, March 4th, 1882, p. 213. For Beaumont's response to the Tunnel see Beaumont (1882).

Ordinance. As *The Times* wrote in February 1882, “military opinion is divided as to these questions.”⁴⁹²

Events in Europe in the decade previous helped to exacerbate such qualms. The French Government was a political instability, with cabinets changing frequently after several attempts at *coup d'etats*. In 1866 and 1870 Prussia had emerged from nowhere to defeat both Austria and France respectively and under the leadership of Bismarck, had brought about the unification of Germany in 1871, creating a new superpower state in Continental Europe and one that was capable of extreme military prowess. Prussia's victory against France had all the more resonance because until that point it had been believed that France was the country with the greatest military power, but the Prussian army had utilised Continental railways to transport troops and supplies across landmass in a way never before possible in warfare; the train had “arrived as the terrible and startling vehicle of invasion.”⁴⁹³ It is understandable why, in this climate, the idea of a permanent rail link with the Continent brought some unease to English minds.

Even if there were no actual invasions through the Tunnel, opponents argued that fear of such an event would be just as bad, creating regular popular panics which would upset the financial markets, trade and international politics. Other arguments used by those against the Tunnel included the cost of maintenance and staffing, of Government and military incompetence in managing or defending the Tunnel (especially after very public military fiascos such as the Crimean War), and safety while travelling in the Tunnel itself.⁴⁹⁴ There were arguments just as vehement from those in favour of the Tunnel.

The invasion fears were countered with suggestions that the Tunnel would provide better communication and transportation links leading to better relations with the Continent and ultimately helping to prevent conflict. Potential high costs of building and maintaining the Tunnel could be offset by the increased trade, lower (if any) tariffs on imported goods

⁴⁹² *The Times*, February 15th, 1882, p. 9.

⁴⁹³ Pick (1994), p. 86.

⁴⁹⁴ See for example, Berney (1882); *The Spectator*, February 4th, 1882, pp. 147-148; Forbes (1883).

and wider opportunity of jobs for the working man. Fears of travelling under the Channel were balanced by the promise of an end to sea-sickness from travel on steam boats and the comfort and ease of sitting on one train from beginning to end, rather than changing from train to steamer and back to train again.⁴⁹⁵ The underground railways in London were also cited as examples of safe travel below the surface of the ground.

The one thing that neither side disagreed on was the English ability to actually construct the tunnel. The engineering and geological difficulties were not so great that they could not be overcome. The Tunnel was an example of English technological success and ability. The debates were not over whether it could be built, but over whether it *should* be built. The public information examined here is concerned with these ideas, rather than engineering prowess.

6.4 Official vs. Unofficial perspectives

Unofficial information about the Tunnel, and perceptions of it, is in many ways more interesting than the official documents. Poems and novels of the time show what a popular and significant topic the Tunnel was and how 'official' information could filter down to a cultural level. An example of such language from Wolseley can be found in his response to the Defence Committee enquiry, in a confidential memorandum of 10th December 1881. The Duke of Cambridge recommended that the memorandum be sent to the "public prints for publication in the shape of an official protest," which it was in June 1882.⁴⁹⁶

A poem of 1882 made reference to the natural defensive significance of the 'silver streak' provided by the Channel, a defence referred to by Wolseley and others in protest to the Tunnel:

⁴⁹⁵ See for example, Beaumont (1882); Hawkshaw (1882); Potter (1882); Bright (1883); Levi (1883); White (1883).

⁴⁹⁶ Letter from the Duke of Cambridge to Sir Garnet Wolseley, 17th January 1882. Cited in Wilson (1994), p. 37.

By the sea girdled round, and a coat iron-bound,
The Almighty has caused us to dwell;
None to make us afraid, unless *self-betrayed*,
Or – like Idiots – our Birthright we sell.⁴⁹⁷

A public lecture in Aberdeen in 1883 made the same point:

If we bring trouble and expense... upon ourselves or our descendants by under bridging the Channel and thus destroying our present natural safe-guard and defence, we have only ourselves to blame...⁴⁹⁸

The similarity between these ideas and those of the aforementioned poem is clear. Both the poem and the lecture refer to a “natural” defence, granted by “The Almighty,” expressing the idea of the Channel being a protection for England given as a “Birthright.” They also both make reference to the fact that it is the English themselves and no one else who are considering given up this protection, in effect “self-betrayed” with “only ourselves to blame.” Finally, the reference to the future, to “make us afraid” and “our descendants” by opening the possibility of invasion via a direct link to the Continent. The two perspectives, one cultural, one official, are identical.

The use of a pseudonym by the poem’s author may suggest that they were in the pay of the Tunnel opponents, although others proudly signed their work, such as Algernon Charles Swinburne. He published a sonnet in a collection of his poems in April 1882 entitled *The Channel Tunnel* in which he clearly expressed his distaste for the project.⁴⁹⁹ In a later letter he wrote in 1890, he acknowledged he had expressed himself “freely both

⁴⁹⁷ CD. DO. (1882), p. 3.

⁴⁹⁸ Forbes (1883), p. 6.

⁴⁹⁹ Swinburne (1882), p. 228.

in verse and prose.”⁵⁰⁰ Those who felt strongly against the Tunnel generally did not appear to show concern for publicly associating their name with their opinions. If Tunnel opponents were also employed in propaganda of this sort, it would somewhat soften the blow that has been attached to Watkins’ so-called courting of the press. It would also strongly suggest that they realised the power of such information in the public domain.

Others used existing cultural references rather than writing their own. Shakespeare’s John of Gaunt speech from *Richard II* was regularly cited in anti-Tunnel literature, evoking the Channel as a natural protector of England against any land link to the Continent:

This royal throne of kings, this scepter'd isle,
This earth of majesty, this seat of Mars,
This other Eden, demi-paradise,
This fortress built by Nature for herself
Against infection and the hand of war,
This happy breed of men, this little world,
This precious stone set in the silver sea,
Which serves it in the office of a wall,
Or as a moat defensive to a house,
Against the envy of less happier lands,
This blessed plot, this earth, this realm, this England,
This nurse, this teeming womb of royal kings,
Fear'd by their breed and famous by their birth.⁵⁰¹

Wolseley used the lines in his anti-Tunnel tirades. In addition, many of the literary and scientific worlds also opposed the Tunnel, including the poets Robert Browning, A.C. Swinburne and Alfred Tennyson, theorist and philosopher Herbert Spencer, and scientist

⁵⁰⁰ Letter from A.C. Swinburne to Sir John Frederick Maurice, 2nd June 1890. Published in Myers (2004), III, p. 11.

⁵⁰¹ Williams Shakespeare (c. 1594), *Richard II*, John of Gaunt speech, II, i, 40-52. For contemporary references to these lines see Whiteside (1962), p. 61; Pick (1994), p. 83; Rogers (1995), p. 371.

Thomas Huxley, who registered their stance against the Tunnel by signing a petition in *The Nineteenth Century* in April 1882.⁵⁰²

A novel of 1883, *The Surprise of the Channel Tunnel; A Sensational Story of the Future*, immersed itself in real events of the time, giving it an air of authenticity. It describes the build-up of Anglo-French tensions based upon colonial wars, taxes on imported goods and “newspaper wars” of ill-feeling after the Tunnel had been built. Following invasion, there is a description of the people of England, as, realising their predicament, they:

Became more and more indignant against the promoters and shareholders of the Tunnel, until in a wave of frantic exasperation a huge mob of ruined wretches visited the residences of these gentlemen, and forcibly expressed their dissatisfaction by smashing all of their windows.⁵⁰³

This not only plays on the contemporary discussion of popular panics, but also the very real fact that in October 1883 the windows of the Channel Tunnel Company actually had been smashed in Westminster.⁵⁰⁴ The story continues, mentioning the arguments of Wolsey in the public domain at the time of publication. Factual information is mixed with fictional to create a very plausible story on some levels. Priced at only sixpence and at only twenty-two pages long, it was accessible to a broad audience, potentially blurring the boundaries between reality and sensation, as had the *ILN* and some etiquette books.⁵⁰⁵

Of course, the Victorians enjoyed this type of fiction and the novel would have been read for this reason in its own right, but it is also a significant and powerful piece of propaganda. Even though there are no illustrations, it manages to create very potent image through its use of visual information:

⁵⁰² Knowles (1882a); Knowles (1882b).

⁵⁰³ Forth (1883), p. 10.

⁵⁰⁴ Whiteside (1962), p. 89.

⁵⁰⁵ See Chapters Four, *Etiquette and Behaviour*, pp. 90-126, and Five, *Periodical Knowledge*, pp. 127-163.

In a few minutes the dome and glass roofing of the Crystal Palace – that glittering temple of peace and industry – were shattered in a score of places. Then the building caught fire, and commenced to blaze furiously, forming an effective background to the scene of strife and carnage that raged in front.⁵⁰⁶

It concludes by saying that after the invasion “that lost us thousands of valiant and noble lives, millions of treasure, and that entailed ruin and misery on hundreds and thousands of people,”⁵⁰⁷ the strength of feeling against the Tunnel was enormous, even more so the realisation that it had been self-inflicted by the decision to build it in the first place, despite the public warnings. The idea of “*like Idiots / our Birthright we sell*” is echoed here; of information ignored. Ultimately in the novel:

An Act was immediately passed declaring it high treason for any person or persons to propose or propound the construction of any such Tunnel again, and everyone wondered how it was that such a Bill had not been passed before.⁵⁰⁸

In reality, Parliament had considered the subject of the Tunnel at length between 1880-1883, creating three committees to investigate and report on the matter. As *The Times* put it, “the subject of the Channel Tunnel scheme has been so much before the public that it was natural that the Government should be questioned as to their views or intentions in regard to it.”⁵⁰⁹ The progress of these committees was reported in the press and was the subject for debate in journals and pamphlets,⁵¹⁰ which ultimately served to perpetuate the haziness between fact and fiction.

⁵⁰⁶ Forth (1883), p. 15.

⁵⁰⁷ Forth (1883), p. 22.

⁵⁰⁸ Forth (1883), p. 22.

⁵⁰⁹ *The Times*, 15th February 1882, p. 9.

⁵¹⁰ For example, see *The Times*, 9th May, 1883, p. 14, *The Times*, 13th June, 1883, p. 7; *The Times*, 11th July, 1883, p. 12; *The Times*, 19th July, 1883, p. 9.

Poetry, prose, press reports and official commentary in these years all served to reiterate the idea of England as a historically strong island, with a natural, almost spiritual, defence in the Channel itself. Literature blended real events with sensationalist imagery. Conversely, the press and lectures and journal publications often alluded to history, imagination and fear. The result was a significant amount of fluidity between appearance and reality of information in the popular literature.

6.5 Language: Rational and Scientific vs. Emotive and Sensational

In many examples, the language used to describe the practical construction of the Tunnel was very logical and pragmatic. In a lecture to the British Association for the Advancement of Science in 1882, Hawkshaw, who had proposed a Tunnel plan himself in 1867, described the technological and geographical understandings of the seabed and construction techniques referring to “the information that is available” and “the summary of our geological knowledge.”⁵¹¹ There were, he continued, “well established facts on the subject.”

These facts, information and knowledge (note that even by the 1880s there was still a significant degree of synonymy between the usage of the terms), were described in very scientific and rational language, not dissimilar to that of the *Illustrated London News* and *The Penny Magazine* in Chapter Five, *Periodicals and Knowledge*.⁵¹² Hawkshaw explained how;

Solid chalk absorbs a large amount of water, but it parts with it with extreme slowness, so that it cannot be said to be truly permeable.⁵¹³

And;

⁵¹¹ Hawkshaw (1882), pp. 5, 6.

⁵¹² See Chapter Five, *Periodical Knowledge*, pp. 127-163.

⁵¹³ Hawkshaw (1882), p. 11.

If air be now drawn out of the drainage heading with a velocity of 10 miles an hour, it will produce a velocity in the tunnel of 2.25 miles an hour... If 48 trains pass through the tunnel in 24 hours, at intervals of half-an-hour, the air will remain pure at the shore ends and in the centre. Between this points, the quantity of carbonic acid (in excess of that normally contained in air (3 ½ parts per 10,000 of air), will gradually increase... to 12.68 parts to 10,000...⁵¹⁴

In this instance it could be argued that his language was deliberately chosen to suit his audience, members of the British Association for the Advancement of Science, but there are similar examples in the press and public documents which suggest this was not a unique instance.

The Times, for example, believed that the increasing amount of debate and discussion demanded a “look at it from a practical standpoint,” continuing at length and in some detail, to discuss the geology of the rock, weights and times of debris removal, cost of labour, practicalities of construction and more, all detailed in rational scientific language. In fact, the prose is so dense with detail that it is hard to select just a small part to illustrate the point:

...supposing the trains to run on the average of the rate of eight miles per hour – there would be six trains in one direction in one direction and six in the other constantly moving out and in. The train mileage would be $12 \times 8 = 96$ miles per hour, or $96 \times 24 = 2,304$ train miles per day...

The chalk on being brought back into contact with the water would quickly dissolve, and the two would form a kind of sludge, the dissolving and mixing being promoted by mechanical agitation.⁵¹⁵

⁵¹⁴ Hawkshaw (1882), p. 18.

⁵¹⁵ *The Times*, 15th April, 1882, p. 8.

The one detailed report from the *Illustrated London News* on the Tunnel in this period followed in its tradition from the 1840s in explaining the technology and science behind the images. Across four pages of the paper are pictures varying from schematics and front and back elevations of the Beaumont machine used for excavating the Tunnel, several images of visitors to the Tunnel examining machinery, socialising and descending in the lift, and a view of how the Tunnel is defended by existing works on the coast. The supporting text, however, focuses on describing these images, but the tone is rational, calm and explanatory:

One of the Views engraved, in a military sense, shows how the tunnel is defended by existing works; this view is taken from the head of the Admiralty Pier. The approaches to the tunnel here appear to be completely under command of the guns of the fortress.⁵¹⁶

The article continues to address the defence systems proposed for the Tunnel in the event of invasion without provoking any sense of panic or sensation.

A comparison of letters and pamphlets published by the elites of society and those of the upper working class also show very different levels of sensationalist language. A three pence publication by, in his own words, “working-man” George Potter, was rational, considered and factual, listing facts and figures on the size, age, length, and use of tunnels around the world and the differing pros of the Channel Tunnel.⁵¹⁷

The language of technology was not always so rational. Despite the Victorian love of science, one Channel Tunnel book of 1887 made the claim that “every healthy Englishman hates statistics.”⁵¹⁸ One French commentator neatly linked the emotive and the rational by suggesting that:

⁵¹⁶ *ILN*, No. 2235, 4th March, 1882, p. 219.

⁵¹⁷ Potter (1882).

⁵¹⁸ Griffiths (1887), p. 93.

Those who reduce everything to mathematics and who wish to reckon only with facts forget the popular imagination is a fact in its own right, and one that has to be taken into consideration...⁵¹⁹

In a previous chapter, the ideas of sensationalism and the sublime were touched upon⁵²⁰ and the same themes can be seen to be recurrent in contemporary thought on the Channel Tunnel. A novel of 1901, *Pro Patria* by Max Pemberton, assumes it had been built and describes French invasion through the Tunnel. Daniel Pick describes the tone:

Deep beneath the surface of the water an engine pulses towards England. The mining machine prepares a tunnel which will then bear a railway. As in the Franco-Prussian war, the train has arrived as the terrible and startling vehicle of invasion.⁵²¹

This type of language is almost dehumanised, dark and bleak. Technology is not presented as progress but as an overwhelming and uncontrollable power. This sort of language had also been used by Wellington to describe steam power back at the start of the century and his words were now quoted back by Tunnel opponents to evoke the power of the Duke of Wellington himself against the project:

Were he [Wellington] now able to speak, what would he say if it were proposed to connect England with France by a permanent and almost indestructible 'ithmus' when all the Continent bristles with bayonets, and the first desire of every Continental Power is to be strong on land and to keep the great military machine, its army, in a state of perfection and complete readiness for active operations upon the shortest notice? ... Those who know Wellington's power of thought, the soundness of his military judgement, his clearness of perception upon such

⁵¹⁹ Valbert (1882), p. 675. Translated in Wilson (1994), p. xv.

⁵²⁰ See Chapter Five, *Periodical Knowledge*, pp. 153-154.

⁵²¹ Pick (1994), p. 86.

questions, will not require to be told what his advice would be upon this question.⁵²²

Similarly in contrast was a public letter to the Prime Minister, William Gladstone, which was also distributed “to every member of the legislature” by the author, Reverend Thomas Berney.⁵²³ The letter is twelve pages long and contains some sixty-three exclamation marks, twenty-three of which are in the first four pages alone, creating a very strong sense of the author’s alarm and excitement. The language is sensationalist and is reminiscent again of the sublime prose of the *ILN* of the 1840s. In one atmospheric vision of invasion:

...the dying, the scalded and the burnt...[where the train]... piles itself up six carriages deep... in a confused and broken pile, over the steaming boiler; which, like a wild beast in a net, roars horribly!⁵²⁴

Another commentator believed that the Tunnel would encourage an invasion that would see “the complex framework of English society... fall to pieces. Industry would be paralysed and public credit would be destroyed.”⁵²⁵ A letter to *The Times* prophesied “a perpetual state of scare, as bad as if we were actually at war” if the Tunnel were built.⁵²⁶

With language such as this in the public domain, it is not surprising that publications such as *The Spectator* opposed the Tunnel on reasons of the danger of “recurrent panic” among the public.⁵²⁷ *The Spectator* also called for a public vote on the subject – with the expectation that the people would not support the Tunnel. In February 1882, the paper

⁵²² Wolseley in evidence to the Departmental Committee, 10th December 1881. For Wellington’s comments see Partridge (1989), pp. 9, 13-14, 18, 31.

⁵²³ Berney 11th March, (1882).

⁵²⁴ Berney (1882), pp. 6-7.

⁵²⁵ Dunsany (1881), p. 755.

⁵²⁶ *The Times*, 2nd March, 1882, p. 4.

⁵²⁷ See for example, *The Spectator*, No. 2797, 4th February 1882, p. 148; and, *The Spectator*, No. 2799, 18th February 1882, p. 225.

argued “it is time the public should make up its mind about the project for a Tunnel across the Channel.”⁵²⁸ The ‘people’ played a recurring role in public debate about the Tunnel.

In these sources, the language of science and rationality was balanced with very sensationalist information, creating a juxtaposition in the way information was presented. This was effective in both selling Tunnel literature as a cultural commodity of spectacle and also in augmenting or in calming public attitudes.

6.6 The ‘People’

In an earlier chapter, the notion of the people, the mass, and of public opinion around the time of the Reform Act of 1832 was discussed, but who formed ‘the people’ in the early 1880s? It was certainly a different group than that of the 1830s, although there was still no homogeneous or unified understanding. The second Parliamentary Reform Act of 1867 nearly doubled the existing electorate created by the 1832 Act by introducing household suffrage and redistributing electoral seats. By 1882 the electorate included about 60% of adult males and for the first time included a proportion of industrial and affluent workers who were better educated than previous generations.

The periodical *The Nineteenth Century* published a petition against the Tunnel in its April 1882 edition containing the signatures of some fifty-four individuals, ending with an invitation to write to the author to add further protests. By the following month the number of names had risen to over four hundred.⁵²⁹ The journal’s editor James Knowles claimed that the journal’s anti-Tunnel stance represented “the strength of public opinion in this country against the Channel Tunnel scheme.”⁵³⁰ According to him, promoters (especially commercial interests) of the Tunnel were well represented in Parliament where the final decision would be made, but:

⁵²⁸ *The Spectator*, No. 2797, 4th February 1882, p. 147.

⁵²⁹ Knowles (1882a), pp. 492-500; Knowles (1882b), pp. 657-662.

⁵³⁰ Knowles (1883), p. v.

The disapproval and dislike of the general public to [the Tunnel] have become continually more and obvious... this Press is but the echo of the talk of ninety-nine out of every hundred unbiased men who have considered the subject.⁵³¹

How accurate this opinion was is debatable. Of the four hundred or so signatures, the majority belong to Dukes, Reverends, Majors or Sirs; there is even listed the name of the “late” Lieutenant-Colonel O.H. Goodenough, voicing disapproval from beyond the grave.⁵³²

Industrialists John Bright and George Potter also argued strongly against the view that *The Nineteenth Century* represented “the people,” since:

While there are many ‘sorts and conditions’ of men who are entirely unrepresented in the list, no one rank, grade, or class, not even cleric or captain, is so numerous as to give to it that ‘widespread’ character which has been claimed for the catalogue as a whole.⁵³³

Thus not only was the list unrepresentative of any one, majority public opinion, but it also *excluded* many as well.

In 1883, the French author Victor Hugo (whose political sensibilities were republican and sympathetic to the British working class), observed of the petition in the April 1882 edition of *The Nineteenth Century*, “in order to frighten its readers, its editor has persistently appealed to their sense of fear.”⁵³⁴ This idea was supported by one of *The Nineteenth Century* authors themselves, who believed that there were “a class of minds

⁵³¹ Knowles (1882a), p. 496.

⁵³² Knowles (1882b), p. 659.

⁵³³ Potter (1882), p. 7.

⁵³⁴ Speech by Victor Hugo, November, 1883. Quoted in Bright (1883), p. 42.

readily affected” by alarmist calls, “which implies compassion for superfluous fears, and pity for inferior intelligence.”⁵³⁵

Others gave them more credit:

As education has improved and knowledge marched forward with gigantic strides, the masses of the people understand these things better than their forefathers.⁵³⁶

Indeed the language of the debate and the types of information being circulated were very different in content and tone to that of fifty years earlier, when Wellington and others had feared the uneducated mob. The fear was now not of working class rioting, but of popular panics (and the resulting damage to the economy), caused by the threat of foreign invasion. In other words, the threat no longer came from social or political disturbance *within* the country, but from an *exterior* military force.

One member of the aristocracy wrote that:

The people are not alarmists. The alarm always comes from above, and that which is now sounded with regard to the Channel Tunnel will find no echo in the heart of the masses when once the question is fairly before them.⁵³⁷

Many commentators also believed that if the People were asked directly, then they would vote in favour of the Tunnel, an idea also privately expressed by the Prime Minister, Gladstone.⁵³⁸ John Bright believed that since the taxpayer ultimately paid for the government and military strategists, they ought to have the casting vote,⁵³⁹ in a similar application of the American demand for no taxation without representation during the

⁵³⁵ Bury (1882), p. 669.

⁵³⁶ Brabourne (1882), p. 530.

⁵³⁷ Brabourne (1882), p. 530.

⁵³⁸ Brabourne (1882), p. 522; See Gladstone comment in Wilson (1994), p. 48.

⁵³⁹ Bright (1883).

War of Independence with England in the latter eighteenth century. Even by 1887 when the strongest panics had subsided, there were still calls that the Tunnel was “a question for the people.”⁵⁴⁰

Contemporary verse also addressed the issue of the People and their right to decide on the fate of the Tunnel:

But here, “A People’s Right” claims due priority;
Their “Native Soil” *is theirs* by just authority;
And the main Question cropping up to-day
Is not of Strata – whether chalk or clay –
But – Whose? *The Power to vote their coast away?*
And – for an aim of *needless* Legislation –
To tamper with the safeguards of the nation?⁵⁴¹

Here the suggestion is that Parliamentary commissions and debates on where to dig and which tunnel company has precedence is much less significant than the People’s right to vote on a matter of such significance and national interest. The dynamic between the ruling elites and the people had changed dramatically from that of the 1830s. Even though there was never a popular vote on the subject, those both for and against the Tunnel attempted to identify ‘the people’ as a *validating* force of their arguments in the public information they dispersed.

6.7 Overseas perspectives

The Channel Tunnel proposed to permanently connect England with the Continent and, as such, it provoked discussion from commentators overseas. Foreign opinion provides an interesting comparison with the literature in England, both in how the Tunnel was perceived overseas and also how the English reactions were understood. Information flow

⁵⁴⁰ Griffiths (1887), p. 81.

⁵⁴¹ CD. DO. (1882), p. 6.

between England and the Continent, or in some cases the fear of ideas flowing *into* England from the Continent, played an important role. Compared to the research of previous chapters, the Tunnel debates offer an interesting window on English perceptions and understandings of information, both from an overseas perspective and in the bigger context of English foreign affairs.

A German Officer, who claimed his nationality gave him “a certain objectiveness”, published his thoughts on the Channel Tunnel in a German journal translation in 1882.⁵⁴² The Journal, *Militar Wochenblatt*, was used as the official publication of the German Army. For the Officer, British fears and debates on the possibility of invasion through the Tunnel revealed more about the need for reform of the British army than anything else. Transportation and communication technology had caused the face of Europe to change and wars to be fought in new ways. A point proved by many by the use of railways to transport armies to Prussian victory against France in 1870.

The traditional British opposition to a domestic permanent standing army, such as those that existed throughout Continental Europe, had become dated. He argued that until this was realised in England, the tunnel should not be built, since Britain did not have the army to defend the country *should* it be invaded. He provides a scathing attack on British military competence during the Crimean War, in Afghanistan, South Africa, in the Zulu Wars, and against the Dutch Boers, showing the essential and critical need for reform.⁵⁴³ The same opinion was discussed in *The Times* in April 1882 just before its publication. The paper takes the article very seriously, discussing it at some length and giving it credence as a foreign opinion.⁵⁴⁴

Newspaper reports of the Tunnel debates allowed information to flow abroad. One Englishman described the reaction he found to the Channel Tunnel scares while he was in the United States, claiming that he had:

⁵⁴² *A German Opinion...* (1882).

⁵⁴³ *A German Opinion...* (1882), p. 2.

⁵⁴⁴ *The Times*, 15th April, 1882, p. 7.

To put up with no inconsiderable extent of good-humoured chaff from my friends about the Channel tunnel scare, and they asked me whether it was really the fact that all the men in England had lost heart, and were afraid they would be murdered in their beds if there were a connection with the Continent by means of two... 'rat holes' they were pleased to call them.⁵⁴⁵

The French newspaper *Les Temps* expressed surprise that there should be so much alarm in England at the thought of the construction of a Tunnel, and suggested that such fears were more fit for works of fiction and entertainment than of moderate minds.⁵⁴⁶ During a visit to the site of the works at Shakespeare's Cliff in July 1882, the Frenchman De Lesseps expressed the opinion that greater communication and transportation between countries could only serve to improve relations between them. His visit and comments were published and disseminated in *The Times*.⁵⁴⁷ A study of Victorian Channel Tunnel cartoons supported the idea that it was a much more controversial subject in England than elsewhere. British artists dominated Tunnel cartoons of this period since "cartoonists [could] live off controversy" in the country.⁵⁴⁸ The Paris correspondent for *The Times* wrote in February 1883 that, "the political uneasiness which the scheme has raised on the other side does not exist here... No Frenchman, of course, regards it as jeopardizing national security."⁵⁴⁹

Not all French were wholeheartedly in support of the Tunnel. At a meeting of French and English workmen in Paris in 1883, a speech given by one of the French hosts, Monsieur Chambert, claimed that:

⁵⁴⁵ Bramwell (1883), p. 29.

⁵⁴⁶ Reported in the "Latest Intelligence from Paris," in *The Times*, 6th April, 1882, p. 5.

⁵⁴⁷ *The Times*, 3rd July, 1882, p. 5.

⁵⁴⁸ Pick (1992), p. 14.

⁵⁴⁹ Whiteside (1962), pp. 57-58.

Many French persons also feared invasions, not of armies, but of ideas. The Tunnel would forward the interests of the people, and that was the real motive of opposition.⁵⁵⁰

Here, we do see some similarity with the fears of 1832; the popular spread of information and ideas could be seen as to be just as threatening to security as actual physical invasion. This was a real fear for many in England as well, since France was associated with revolution and republicanism. *The Sunday Times* argued that the Channel was a:

Greater bar to the movements of Nihilists, Internationalists and Bradlaughites than is generally believed, but with several trains a day between Paris and London, we should have an amount of fraternising between the discontented denizens of the great cities of both countries, which would yield very unsatisfactory results on this side of the Channel.⁵⁵¹

From an English perspective, the historian Goldwin Smith recognised that in 1882 the “intellectual isolation of England is already almost a thing of the past.”⁵⁵² He continued to argue that military considerations must come before intellectual ones. For him, the physical threat of invasion was more concerning than the intangible spread of foreign ideas. In contrast to the Frenchman Chambert, Goldwin Smith saw the spread of ideas as “intellectual”, philosophical, academic and literary. The French industrialist Chambert spoke of the “interests of the people,” promoting business opinion, socialist politics and the implicit French revolutionary traditions of equality, liberty and fraternity. These ideas remained uncomfortable to many English elites even by the 1880s.

Continental foreign policy influenced English attitudes towards the Tunnel; either fears of Continental military power, or a desire to forge better relations with their neighbours. In contrast, generally speaking, overseas attitudes to the Tunnel were at best positive and

⁵⁵⁰ Speech by M. Chambert, November 26th, 1883. Quoted in Bright (1883), p. 12.

⁵⁵¹ *The Sunday Times*, 16th April, 1882.

⁵⁵² Goldwin Smith (1882), p. 334.

at worst simply indifferent. The panics and debates occurring in England, the mass of cultural literature and information published, seem a uniquely English reaction. Access to information and the free flow of ideas remained controversial and suggest that, in England, information was perceived as a powerful and potent force.

6.8 Open Access to Information

Despite the concerns that revolutionary ideas might spread across the Channel, contemporary English accounts were full of calls for complete and reliable public access to information about the Tunnel. An essay in *The Contemporary Review* in 1883 argued that people had been misled by talk of England's historical defensive geographical position as an island. The essay promises to "discuss several points which have not as yet been placed before the public by any of the writers who have rushed into the burning controversy of the Channel Tunnel"⁵⁵³ and goes on to describe the topographical history of the European land mass in order to allow readers to have a more fully informed view. His claim is a fair one. In all the sources examined for this chapter, there is only one other that acknowledges the same point that Britain once was connected to the Continent by land.⁵⁵⁴

A pamphlet of 1882 called for all military memoranda in objection to the Tunnel to be published:

They have reason on their side; and nothing can be gained by the withholding of those documents from the knowledge of the public. Let them be produced, and every man will then judge for himself of the objections made to the Tunnel...⁵⁵⁵

The nation had "a right to know the worst, honestly and fully told,"⁵⁵⁶ as well as the good and successful. When the documents were finally published, Watkin publicly professed

⁵⁵³ Boyd Dawkins (1883), p. 240.

⁵⁵⁴ Levi (1884), p. 8.

⁵⁵⁵ Potter (1882), pp. 22-23.

his pleasure that all the documents of the enquiry would be disclosed to the public. Despite the report of the War Office in August 1882 condemning the Tunnel, he used the disclosure to draw attention to those military men who had *supported* the Tunnel, then ignored the rest.⁵⁵⁷

Concerns over the withholding of information from the public domain also manifested themselves in satirical pamphlets. One of these was the fictitious *England Crushed: The Secret of the Channel Tunnel Revealed* of 1882, which was written as if it was a truthful account, at no point stating that it was a sensationalist story, potentially leaving readers uncertain about its origin. Of course, to contemporaries, it may have been an obvious satire and not at all likely to have been taken literally. In either case, the fact that such satire was being written at all suggests that it was a well-known subject worth satirising. As we have seen in Chapter Four, *Etiquette and Behaviour*, “true wit can only spring from informed and accurate knowledge of the subject it comments upon and sometimes mocks. Facts are nearly always funnier than fantasy.”⁵⁵⁸

As *England Crushed* was priced at only three pence it was affordable by almost all, and its cover dramatically warned readers that it would “be dangerous to be found with this in possession on the Continent”.⁵⁵⁹ The pamphlet continued, that it contained:

The surreptitiously acquired contents of secret documents of extreme importance at the present moment... A formal Despatch, two Official Enclosures, and a curious memorandum are all the papers we are enabled to place before the British public at present.⁵⁶⁰

⁵⁵⁶ Forbes (1880), p. 191.

⁵⁵⁷ *The Times*, 16th August, 1882, p. 7.

⁵⁵⁸ Adburgham (1961), pp. 11-12.

⁵⁵⁹ *England Crushed...* (1882), frontspiece.

⁵⁶⁰ *England Crushed...* (1882), p. i.

The 'official' documents that it contained were internal German government and military papers, which proposed that Germany should be seen to publicly encourage the building of the Tunnel, so that it could ultimately (with an eerie foretelling that makes for uncomfortable reading) be used by the Fatherland against Britain in order for Germany to "overshadow the world... chain the lion and domesticate to our own uses the hitherto free and mighty king of nations."⁵⁶¹

The fact that it was supposedly written by German officers was not unintentional. Following Prussia's sudden defeat of France and her huge standing army, in the war of 1870, and Germany's successful reunification in 1871, for many contemporaries it was Germany and Bismarck that were emerging as the greatest potential military threat in Europe. The publication played on these fears by discussing Germany's secret plans for conquering all of Europe. Furthermore, it advised the German military and political leaders to:

Buy up shares [in the Channel Tunnel companies]; bribe all writers and politicians you can. Hesitate at nothing that will promote the Tunnel. *Especially do so in France...* Bribe most liberally to silence (if you can) all historians, politicians and writers.⁵⁶²

Such dramatic language tapped into concerns expressed within England by Garnet Wolseley and others. By integrating information already in the public arena with fiction and satire, it created for itself a certain degree of authenticity, not dissimilar to the methods employed by the *ILN* and *The Penny Magazine*.⁵⁶³ At three pence a pamphlet, added to the Victorian love of sensation, the publisher P.S. King had found a lucrative output for Channel Tunnel information. There is no evidence that this was based on any reality of opinion in Germany and indeed other sources point to the contrary.⁵⁶⁴ Rather, it

⁵⁶¹ *England Crushed...* (1882), p. 7.

⁵⁶² *England Crushed...* (1882), pp. 3-5.

⁵⁶³ See Chapter Five, *Periodical Knowledge*, pp. 150-160.

⁵⁶⁴ See for example, *A German Opinion...* (1882).

can be used to illustrate the extent to which agitation, sensation, and satire could reach in England in these years, when regarding secret or undisclosed information.

6.9 Propaganda and public relations

In this climate it was not difficult to use (or mis-use, depending on your viewpoint) information for the purposes of cant:

A rather amusing confirmation is given to the old saying that ‘facts and figures can be made to prove anything’ by recent correspondence upon this question [of the Tunnel].⁵⁶⁵

James Knowles, editor of *The Nineteenth Century*, used his journal as a vehicle for anti-Tunnel publicity. His 1883 publication *The Channel Tunnel and Public Opinion* claimed to represent public opinion, but was exceptionally skewed in favour of views against it. The book reprinted the original petition from *The Nineteenth Century*, included two letters from 1882 written by George Childers, the Secretary of State for War and by Sir Garnet Wolseley, both of whom were very publicly against the Tunnel for reasons of defence. The second half of the volume was dedicated to an incredibly narrow selection of “quotations from the press.”⁵⁶⁶

For example, the volume printed only two articles from *The Times*, despite there being over twenty leading stories on the development and opinion of the project in 1882 alone, most of which were balanced reports from official publications and debates. The extracts selected by Knowles are therefore only half the story; the half that suited his purpose. No doubt there was strong feeling against the Channel Tunnel, but claims to represent public opinion are somewhat overstated.

⁵⁶⁵ Dunsany (1882), p. 289.

⁵⁶⁶ Knowles (1883), p. 90.

For the advocates of the Tunnel, Watkin himself used the press to report elements of glamour and social prestige that the Tunnel could bring. In March 1882, he began a “war of propaganda with a powerful blend of dinners and unscrupulousness”⁵⁶⁷, in a “series of publicity stunts.”⁵⁶⁸ Reports in the *ILN* described the special trains that were laid on to transport guests, the extravagant buffets and drinks receptions and dinners and speeches at the Lord Walden Hotel in Dover. They were coupled with illustrations of distinguished men examining the machinery and generally having a sociable time.⁵⁶⁹ He decorated the tunnel with potted plants, served champagne to guests and used a small steam engine to provide electric light for visitors in the tunnel,⁵⁷⁰ still a novelty even by the 1880s. A *Punch* cartoon of 1882 depicted Watkin sitting in the Tunnel, entertaining Britannia herself. In the background we can see crates with *fois gras*, bottles of champagne and piles of French and English butter. The caption has Britannia commenting to Watkin:

As I ruled the waves, I must draw the line somewhere, so I stop at Channel Tunnels – till further notice. But happy to come and lunch with you any day and talk it over.⁵⁷¹

The implication seems to be that while England and her people command the seas and have no real interest in a Tunnel, they are happy to turn a blind eye to objections while being wined and dined by Watkin (see fig. 10, p. 194).

⁵⁶⁷ Slater & Barnett (1958, p. 63).

⁵⁶⁸ Rogers (1995), p. 366.

⁵⁶⁹ *ILN*, No. 2235, 4th March, 1882, p. 217; *ILN*, No. 2237, 18th March, 1882, p. 255.

⁵⁷⁰ Bonavia (1987, p. 33).

⁵⁷¹ *Rule Britannia* by Linley Sambourne, in *Punch*, 15th July 1882.



RULE BRITANNIA.

Britannia (to Sir E. Watkin). AS I RULE THE WAVES, I MUST DRAW THE LINE SOMEWHERE, SO I STOP IT AT CHANNEL TUNNELS—TILL FURTHER NOTICE. BUT HAPPY TO COME AND LUNCH WITH YOU ANY DAY AND TALK IT OVER.

Figure 10 "Rule Britannia" by Linley Sambourne. Originally published in Punch, 15th July 1882.

Britannia (to Sir E. Watkin). As I rule the waves, I must draw the line somewhere, so I stop it at the Channel Tunnels – till further notice. But happy to come and lunch with you any day and talk it over.

Reproduced with Permission of Punch Ltd., www.punch.co.uk

Other papers explicitly referenced that reporters had been invited to join the events. The Tunnel was promoted as being not just an achievement of technological and engineering ability, but also a point of social recognition and respectability, to the extent that "to

attend one of Sir Edward's tunnel parties seems to have become one of the fashionable things to do in English society in the early part of 1882".⁵⁷² Anti-tunnel opinion often argued that these social events allowed commercial interests to use their hospitality effectively in order to buy support.⁵⁷³ There was a certain class of people:

Which is affected by free tickets, champagne luncheons, and the well-chronicled profuse hospitality of the Channel Tunnel promoters. This form of advertisement has been persistent and continuous, and, truth to say, very successful.⁵⁷⁴

In one of several letters that he wrote to *The Times* during this period, Watkin was quick to point out that this was not the case. However, he also managed to conclude his letter with the fact that one of the material advantages of the Tunnel would be that the newspaper to which he was writing would soon be able to pass through the tunnel itself and "will be placed on the breakfast tables of the people in Paris on the morning of publication."⁵⁷⁵

More recent discussion of Watkin's use of the press, asserts that he used the *Illustrated London News* as a vehicle for publicity,⁵⁷⁶ but as mentioned earlier in the chapter, my research challenges this view. The position of the *ILN* has been noted by Daniel Pick and Richard Rogers who argue, respectively, that the *ILN*:

was to be used by pro-tunnel interests to present a more enthusiastic account of the prospective technological advancement of the Channel tunnelling; in an article

⁵⁷² Whiteside (1962), p. 42.

⁵⁷³ Bury (1882), p. 669; Simmons (1882).

⁵⁷⁴ Bury (1882), p. 669.

⁵⁷⁵ *The Times*, 20th June, 1881, p. 10. In 1881, the London edition of the newspaper could be bought directly in Paris but since it was shipped over by steamer, there was not the immediacy of presence that Watkin suggests.

⁵⁷⁶ See Travis (1991), p. 481.

at the height of the controversy, the paper tried to calm the military fears by detailing the invulnerability of the defence systems proposed.⁵⁷⁷

And, that the *ILN* was one of the journals:

which Watkin had won over to promote the cause.⁵⁷⁸

Both Pick and Rogers cite just one example from the *ILN* for their arguments, which is the issue from 4th March 1882. While it is true that this particular edition of the paper featured a large report on the Tunnel, this is the *only* detailed coverage of the Tunnel between 1880 and 1883. The project is mentioned only nine times at all in this period and these other reports take the form of a few lines or a paragraph reporting progress on the development. None of the other reports are illustrated,⁵⁷⁹ unusual for major news items in the *ILN* – as we have seen in a previous chapter. Such limited coverage would not suggest that the paper's editors were strongly under Watkin's influence, although it could be argued that the effects of wining and dining journalists did not adversely affect the *ILN's* report of the 4th March 1882.

The large six-page pictorial spread of the Tunnel and Watkin's society visits in March 1882, had pictures of the digging machinery, of the guests enjoying the delights of the Tunnel and of the vista from Shakespeare's Cliff (see figs. 11 and 12, pp. 198, 199). There was also supporting text, discussing the technical feats of the engineers and the safety mechanisms being built into the Tunnel.⁵⁸⁰ These diagrammatic illustrations and

⁵⁷⁷ Pick (1994), p. 90, n. 2.

⁵⁷⁸ Rogers (1995), p. 367.

⁵⁷⁹ See *ILN*, Nos. 2227 (7th January 1882, p. 14), 2230 (28th January 1882, p. 83), 2233 (18th February 1882, p. 155), 2234 (25th February 1882, p. 187), 2237 (18th March 1882, p. 255), and, 2241 (15th April 1882, p. 362).

⁵⁸⁰ *ILN*, No. 2235, 4th March 1882, pp. 213, 217, 219, 220, 221, 224.

text were reminiscent of those employed by etiquette literature, the *Illustrated London News*, and *The Penny Magazine*.⁵⁸¹

As a brief aside, a book of 1887 used these same images to illustrate its own text, explicitly acknowledging their source as the *ILN* from 4th March 1882.⁵⁸² A later 1929 issue of the *ILN* once again used these same images in an article discussing the impact of aeroplane technology on the old Tunnel debates.⁵⁸³ Given the argument in Chapter Five, *Periodical Knowledge*, that the *ILN* was actively trying to preserve itself as a form of the historical record from its outset in 1842,⁵⁸⁴ this suggests that, forty years on, it was still pursuing the same policy. Likewise, working man George Potter's facts and figures on tunnels from 1882 discussed above, are referenced to an article in the *Penny Cyclopaedia and Knight's London*,⁵⁸⁵ showing that even by the 1880s these volumes continued to be used as reference guides of information.

Both Tunnel advocates and opponents were using information as a propaganda tool, and the power of this information to inform or manipulate public opinion was much more explicitly recognised and discussed by the 1880s than it had been previously. Not only this, but it seemed more acceptable to use information in this way and, significantly, it was being done at a cultural and popular level rather than that of central government, as is often supposed.

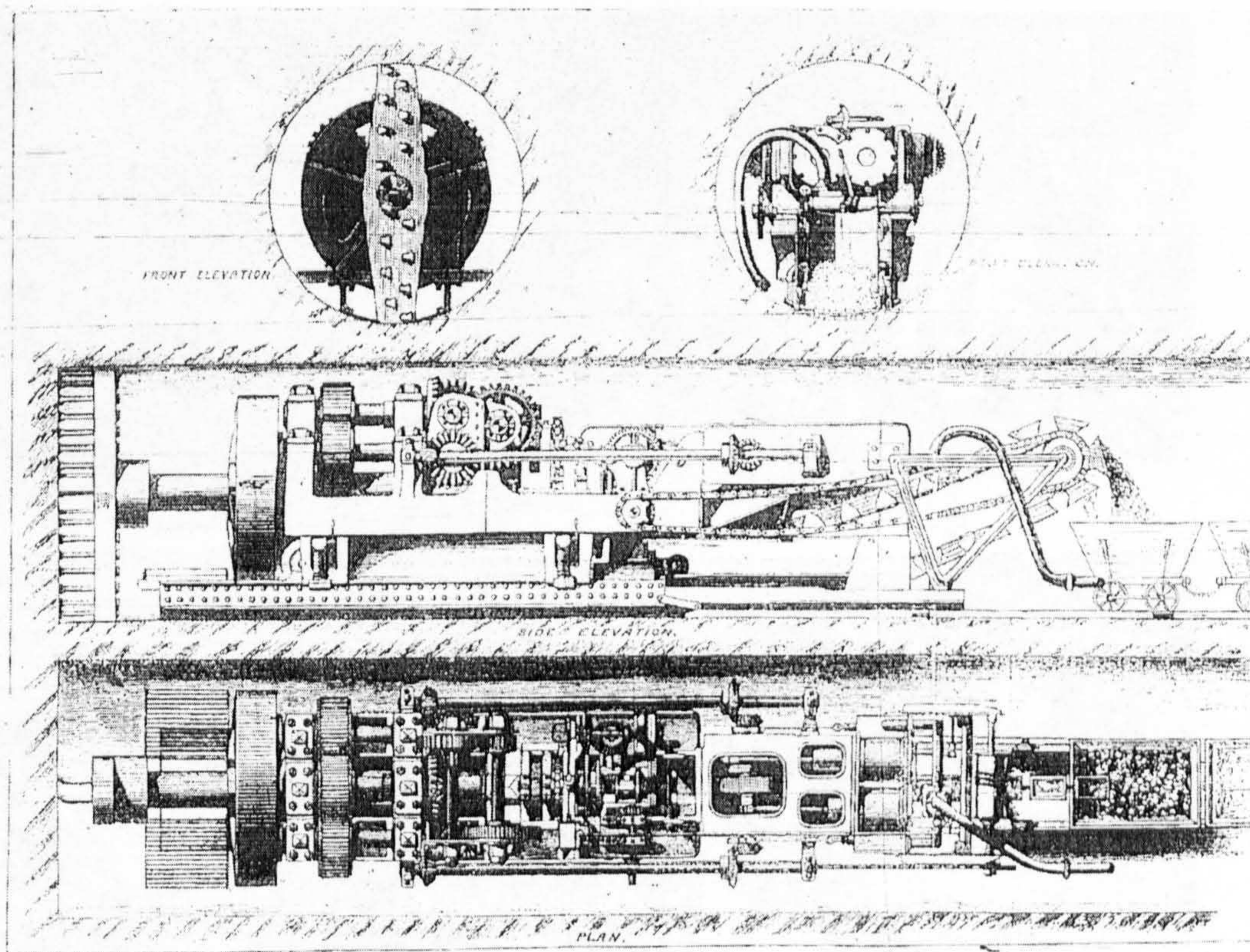
⁵⁸¹ See Chapters Five, *Periodical Knowledge*, pp. 138-149, and Seven, *Bringing it all Together*, pp. 222-225.

⁵⁸² Griffiths (1887), p. 2.

⁵⁸³ *ILN*, Vol. 174, 19th Jan 1929, pp. 83-85.

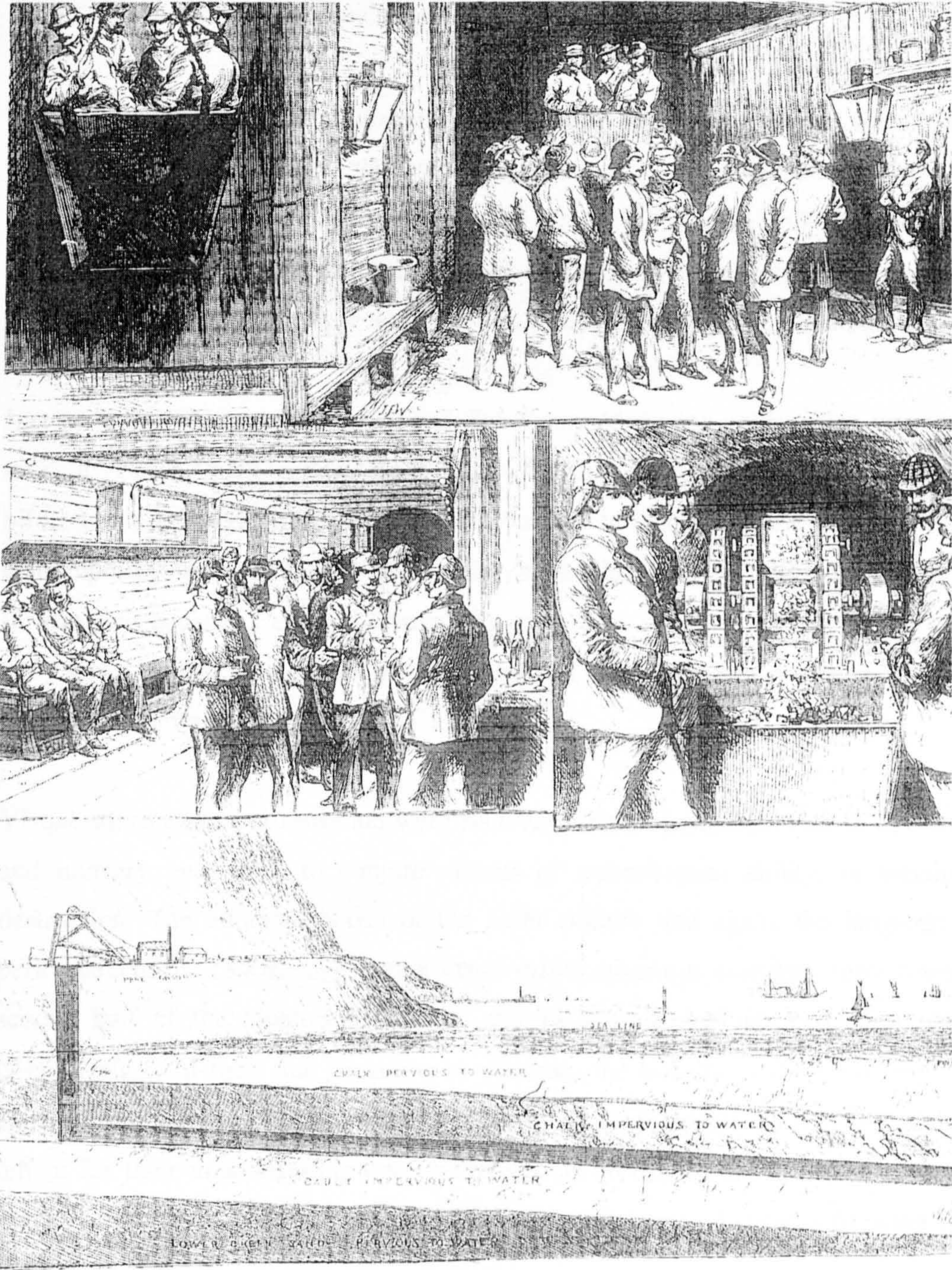
⁵⁸⁴ See Chapter Five, *Periodical Knowledge*, pp. 156-160.

⁵⁸⁵ Potter (1882), p. 14.



BEAUMONT AND ENGLISH'S COMPRESSED-AIR TUNNELING MACHINE

Figure 11: Beaumont and English's Compressed-Air Tunneling Machine. *Illustrated London News*, No. 2235, 4th March, 1882, p. 224.



1. Going down in the Cage. 2. Arrival at the bottom of the shaft. 3. Sewal or Junction. 4. The Compressor-Box During Making. 5. Position of Tunnel.

Figure 12: Visiting the Channel Tunnel. Illustrated London News, No. 2235, 4th March, 1882, p. 217.

6.10 Contribution to Knowledge

The examination of public documents between 1880 and 1883 illustrates some interesting trends and continuities to those discussed in previous chapters. It suggests that perceptions of information were developing across the century and in some areas had become quite sophisticated. There is also evidence to suggest that public notions of information, in this example at least, were still maturing and indeed remained quite fluid.

Just as in the 1840s with the *ILN* and *The Penny Magazine*, information was used as a tool of Tunnel propaganda. Both those for and against the project used filtered information, tailored language and a mix of media to reach their audiences. Cultural and contemporary references were alluded to and evoked and each perpetuated the other. Information became a cultural commodity as well as an economic one; etiquette books and sensationalist Tunnel literature being as commercially valuable as Reuter's telegraphed news.

Visual information and sensation were also key themes. Language, rich in colour, vision and imagery, was used to conjure visions of technological ability, or technological destruction. The etiquette books of the latter century and again, the language of the periodicals of the 1840s, suggest that visual information was emerging more towards the second half of the nineteenth century, and in a more sophisticated form. Although Nightingale used facts and diagrams to illustrate the horrors of the Crimean War, the visual power of the information was the same. As more people became literate and less reliant for their understanding upon pictures over words, visual information developed into a more fluid concept that could be found in multiple manifestations from the 1840s.

The dichotomy between science, rationality, and facts and the sublime, sensationalist, and emotive, continues throughout the Tunnel debates, and has strong parallels with those of the study of *The Penny Magazine* and the *ILN* in the early 1840s. There are also links to the hysteria over the 1832 Reform Act and with Eleanor Sidgwick's battles for female

education at Newnham in the 1860s and 1870s.⁵⁸⁶ The language of science and rationality is balanced with very visual information, creating juxtaposition in the way information was presented. The relationships between the people, the mass, the minority, and of the Government, the elites, the majority, and how they regarded information, and their right to it, alter subtly over the century and are not allied to clear-cut distinctions of class or sex.

What the Tunnel study has also revealed is that there appears to be a change in attitudes towards notions of *public* information and of what should be disclosed freely. It also illustrates a development of factual and fictional information being used alongside one another, an idea touched upon in the discussion of periodical use of illustrations that did not always portray reality. Cultural and social symbols and imagery were littered with actual events or phrases that could be popularly recognised. Likewise, official speeches and memorandum used cultural references to give them authenticity and significance. The two were blended so richly that they perpetuated each other, forming a particular fluidity and blurring between information based upon fact and information based upon fiction.

The idea of 'the people' and the public disclosure of information are recurrent and significant themes of the period between 1880 and 1883. The notion that the public should have a say, that they had a *right* to a say and to be fully aware of all the information is something that appears strongly here, but this is not something which has been so significant in previous chapters. By the 1880s, public awareness and the idea of an *expectation* to information had become quite distinctly defined. There was still some conflict between the people of the mass electorate and the literary and educated elites, but much of the tension of the debates of the 1830s and 1840s had been resolved.

The period between 1880 and 1883 was distinctive in English history for the intensity, popular panic, technological capability, and cultural influence of the Channel Tunnel project. The Tunnel debates provoked a huge public reaction, but it was one that was

⁵⁸⁶ See Chapter Three, *Individual Perceptions*, pp. 56-63, 79-87.

grounded in much deeper contemporary attitudes, developments and concerns. Although it could be argued that such a specific case study provides only a limited perception of information towards the end of the nineteenth century, it could also be said that extreme circumstances sometimes bring out an exaggerated response allowing more striking conclusions to be drawn. Added to the previous chapters, we can begin to see some very striking continuities and developments in nineteenth century perceptions of information. In the final chapter these will be explored in more depth.

Chapter 7

Perceptions of Information: Making the Connections

7.1 Introduction

The previous chapters have each had a very specific focus and have dealt with a selection of decades and issues across the nineteenth century in England. Whilst each of them stands on their own, it is also important to examine some of the common and reoccurring themes between them, and any chronological developments throughout the century. Perceptions of information in this era are multiple, complex and fluid, and it was never the aim of this work to offer one singular explanation of how information was thought of during the nineteenth century. It is not only between our own contemporary society and the nineteenth century that perceptions of information differ, but also often during the nineteenth century itself, since “perceptions change with experience; and perceptions are context dependent.”⁵⁸⁷ It is perhaps most striking that the similarities, continuities and reoccurrences between chapters occur at all. Given the difference in subject matter for each chapter, perhaps this gives these similarities and differences a great deal of credence *because* of this diversity.

As we have seen, there was a great flux in perceptions and understandings of information during the nineteenth century. It was thought of differently to how we think today and this was irrevocably linked to other developments in the socio-cultural and political climate. Information as an abstract concept, or as a thing embedded in something more tangible, such as publications, evolved alongside society. As nineteenth century society changed, so too did English perceptions of information. Society continued to change into the twentieth century and beyond and notions of information have continued to develop.

⁵⁸⁷ Tufte (1983), p. 56.

More significantly, the nineteenth century can be seen as the crux of change between the pre-modern and what we understand as modern understanding of information.

This chapter argues that, based on the research, there are four main conclusions to be made regarding English nineteenth century perceptions of information, and that these developments were unique to emerge in this form in the 1800s:

- Information becomes increasingly understood as an abstract thing or idea in its own right, with a more explicit awareness of 'information' itself, as opposed to simply being informed.
- People become more aware of their *right* to information and their *right* to be informed. This awareness becomes more acceptable by society as a whole.
- Public and private information become more clearly defined areas.
- Information becomes increasingly expressed explicitly through image as well as through text; what I have termed 'visual information.' That is, information that can be understood or read from illustrations, diagrams, or visual clues or images. This is in contrast to the more oft-argued notion that the nineteenth century was more an era of words than image.

It would be facile to simply suggest that these themes developed over the course of the century, or that they emerged in any particular decade. A more sophisticated explanation would be that perceptions of information changed gradually and co-existed with many other views and understandings. Information was only emerging as a recognised and independent phenomenon during the 1800s and so explicit attitudes towards it changed and developed within an altering socio-cultural climate.

As Black *et al* have argued:

Even in Victorian Britain, as Weller and Bawden (2006) observe, although the term 'information' became commonly used in its everyday sense it was only

rarely conceived as an 'independent' phenomenon or resource which could be divorced from a particular context.⁵⁸⁸

Over the course of the century, the notion of information did become more explicitly recognised as a thing or idea in its own right as opposed to simply being informed. This was a significant shift from pre-modern understandings to modern perceptions of information and offers a new chronology for social conceptualisations of information.

The rest of the chapter tries to tease out some of these continuities, developments, and themes and relate them to the bigger contextual picture and to our historical understanding of information in society and culture. It offers an introduction to some – by no means all, or fixed – nineteenth century perceptions of information, by nineteenth century English society.

7.2 Conclusion One: Information becomes more of an abstract thing in its own right

My research suggests that information became more explicitly recognised as an independent thing, concept, or idea, over the course of the 1800s. Of course, without a detailed comparative study of the eighteenth century, it is difficult to say absolutely that information became more of an abstract thing in its own right for the first time during the nineteenth century. Nonetheless my conclusions do suggest this to be the case.

Information in some form had been considered valuable well before the nineteenth century, in forms such as military or political intelligence for example. Postman argues that prior to the 1800s, information had tended to be thought of as a means to an end, a way of persuading or informing someone to achieve a specific purpose. Thus, "information was, in short, a rhetorical instrument."⁵⁸⁹ It was only in the nineteenth

⁵⁸⁸ Black *et al* (2007), p. 238. The reference to Weller and Bawden (2006) is a paper based on the research in Chapter Three, *Individual Perceptions*, pp. 48-89.

⁵⁸⁹ Postman (1999), p. 87.

century, he suggests, when new technologies such as the telegraph began to abstract information from its purpose, that it began to be regarded as something in its own right, the end itself, rather than just the means.

We have to ask why this first happened during the 1800s rather than before or afterwards. Postman suggests it was entirely down to new technology. There is a great deal of validity in this point, but there were also other factors at work. This PhD research has deliberately taken a socio-cultural approach throughout and the sources and conclusions strongly support the idea that social and cultural factors were also at play in changing perceptions of information in the nineteenth century.

Industrialisation and the growth of technology during this period have been documented at length.⁵⁹⁰ However, the ripple effects were felt not just at a technological, infrastructural or bureaucratic level, but also at a social and cultural one. These ripple effects also contributed to the detachment of information from its purpose or context. Society became, albeit slowly, more democratised and commercial. Information became something to aspire to, to better your social standing, through the ability to purchase a cultural commodity such as the *Illustrated London News* or etiquette books. The 'March of Intellect' that had been so mocked in the 1820s was, later in the century, actively encouraged through periodicals such as *The Penny Magazine*. Women wanted information on equal terms to men. The middle classes purchased Society gossip, but also wanted 'insider information' as to how to improve their social mobility. Increased literacy levels, the abolition of taxes on knowledge in 1855 and, yes, also communication and printing techniques, augmented the scope, audience and content of newspapers.

During the nineteenth century it became a public cultural commodity. That is to say, the rhetoric use of information of the eighteenth century had been based upon an educated and literate elite who could understand and formulate such literary utilisation. As information became less associated with rhetorical argument and a means to an end

⁵⁹⁰ See for example, Henderson (1972); Floud & McCloskey (1994); Ferguson (2001); Floud & Johnson (2004).

during the nineteenth century, it also became less associated with these privileged classes. Information became more of an abstract thing in its own right, which had the fundamental effect of democratisation since it no longer required a literary or rhetorical skill. In so doing, perceptions of information changed towards those of modernity, in distinction from pre-nineteenth century pre-modern notions of information.

Historians have tended not to comment on this effect because they do not, generally speaking, think of information in the same way as information scientists. And, library and information science scholars, generally speaking, have until fairly recently, not considered that information – as opposed to information technology – was understood or thought of differently prior to our own era. This information history research has been able to ask some new questions and explore from a new perspective. As argued in Chapter One, *Definitions*, information is not an ahistorical, heuristic analytical category, as has often been assumed by scholars. Rather, it is a category that was made and remade in highly relevant ways during the nineteenth century. If these conclusions can sharpen the scholarly questions asked in the future and challenge existing views of both historians and information scientists, then this research will have served a significant purpose.

Taking the long view across the century, as this research has done, allows us to see the longer-term changes that were happening gradually across the century. The abstraction of information did not happen overnight. It was a gradual process, occurring alongside traditional understandings of information as a tool for a purpose, rather than something to be thought of independently. There are examples from the research that show this essential continuity and in some cases, the two occurring almost alongside the other. As has been discussed at length, information was not a homogeneous concept, much less so people's perceptions or opinions of it. The nineteenth century was a period of change, but as far as perceptions of information can be understood, it was slow, gradual and really only becomes recognisable when seen in the long view over the century.

In the 1820s and early 1830s, Wellington took the idea of information, of being informed, in the sense of useful and timely political details that could help him avoid riots by the

mass, or pass the Reform Bill. His notion of information as an educator was similar; that to be informed helped the elites govern but would provoke disorder and questioning among the lower classes. As we have seen, for him information was intrinsically tied up with a purpose. It was not an abstract thing or notion, it did not exist as anything separate in its own right. It was a means to an end. In Chapter Three, *Individual Perceptions*, it was noted that Wellington's view was very much based upon eighteenth century values and ideals. His perception of information therefore followed this pre-nineteenth century pattern of a means to an end rather than an abstracted form in its own right.

Etiquette books too, dispersed varying forms of information and for different purposes, but it was related to the bigger question of behavioural standardisation. Arguably, the more superficial examination of etiquette manuals as commercial products and distributors of gossip or household tips, particularly in the later decades of the century, were much more conscious of information as a saleable commodity. The two formats are not mutually exclusive and indeed operated alongside each other.

Julius Reuter's perception of information is a very good example of information being removed from any context and sold, referred to and even documented, as abstract information, news, or intelligence. The newspapers that were willing to pay £200 a month (c. £15,000 in modern money)⁵⁹¹ for Reuter's service were not paying for highly sensitive political intelligence – unless the foreign sales of *Les Miserables* or the cricket scores counted as such – nor were they paying for commentary and analysis. They were paying for abstract information. Timely, yes, that was of course a factor, and some details were less valid than others, as shown by the failure of the Dalziel Agency American news. Yet there was such variety in the topic and such regularity and continued success of information delivery by Reuters, that it is possible to see the striking differences between this understanding and that of Wellington. The fact that Reuter struggled initially to get people to use his Agency is not insignificant. The century was a time of change and new perceptions of information were emerging, which began to understand it as *something*, an

⁵⁹¹ *Rules of Common Action* (1870) - [Reuters Archives LN248/ 1/880244](#).

abstract concept, in a way that it had not been previously. Change was subtle as well as gradual.

Even abstracted information could serve a purpose. In the fluid understandings of the nineteenth century information could be a means *and* an end. For Nightingale, her statistical and visual information were can be understood as disseminators of information themselves, showing the mortality levels of soldiers and civilians in different places at different times. However, they also served the purpose of her reforming ambitions. The same can be argued of Eleanor Sidgwick who presented statistics that can be read and examined in their own right, but that also served her bigger purpose of educational change for women. Once again, the changes in semantics, understandings and perceptions in this period could be very subtle and discreet. This does not mean they were insignificant.

7.3 Conclusion Two: Public and Private Information

During the course of the research, an interesting dichotomy emerged between public and personal (or private) information. There are repeated examples across all the chapters which touch on this idea, and it is a particularly interesting development considering that the nineteenth century has been previously examined by other scholars as the period of *public* information institutions and infrastructures, such as libraries and museums, information gathering bureaucracy and public policy government.⁵⁹² Complementing this existing work, my research shows these public/private forms of information taking place in the social and cultural realms of society.

Eleanor Sidgwick collected very intimate and personal statistics on the girls under her care at Newnham College in the late 1880s, intended for a very public use, to convince critics of the Newnham girls' biological and physical ability for university education. Other sets of personal data she did make publicly available, by publishing them in

⁵⁹² Beniger (1986); Eastwood (1989); Yates (1994); Brake *et al* (2000); Black (2001); Agar (2003); Higgs (2004); Black (2005); Taylor (2005); Weller & Bawden (2005).

pamphlet form.⁵⁹³ The rules of etiquette attempted to regulate and suppress personal individuality, preferring public standardisation, of appearance over reality. Personal quirks, habits and preference of dress in the middle classes were frowned upon and “should all be controlled and repressed.”⁵⁹⁴ Such information on your private person and social station were strongly controlled, so that in public an “exterior polish”⁵⁹⁵ hid such personal information. Etiquette books were a good example of how complex and fluid notions of public and private information could be in this period. They were bought for individual consumption, for private use, but this fed into a much more publicly accepted and regulated behaviour and understanding.

In both etiquette books and the *Illustrated London News*, there were moves towards the inclusion and dissemination of public information on private individuals. Interest in celebrity and gossip was nothing new, certainly during the latter part of the eighteenth century Society figures were creating what has been termed “a cult of celebrity.”⁵⁹⁶ Generally speaking however, this ‘cult’ was for a select, literate audience, who did not have the public availability and middle class audience of the Victorian phenomenon of etiquette literature. In Chapter Four, *Etiquette and Behaviour*, it was argued that by the 1870s there was a change in etiquette books, which for the first time began to report on Society parties and Society names instead of prescribing regulative behavioural codes for the middle class audience. This idea of a new public interest in private and personal information on individuals had implications for personal privacy and the dissemination of such information.⁵⁹⁷ The public information, or gossip, in these books still tended to be anonymous, rather than directed at specific individuals. Other genres of publication, such as the *ILN*, adopted an approach that was less ‘gossipy’ but much more focused on named individuals, bringing their personal and private information into the wider public domain.

⁵⁹³ Sidgwick (1890).

⁵⁹⁴ Beeton (1876), pp. 121-124.

⁵⁹⁵ Humphreys (1897), p. 11.

⁵⁹⁶ Rosenthal (2006).

⁵⁹⁷ See Chapter Four *Etiquette and Behaviour*, pp. 119-123; and Dames (2001).

Even at its inception in the early 1840s, the *ILN* included “Popular Portraits” of politicians, actors and public figures of the day.⁵⁹⁸ These were not historical figures but ones that were very much alive and contemporary. The portraits included an illustrative image and a biography of the individual’s public life and work to date. These were quite different from the Society gossip of previous decades, which speculated on the love and financial affairs of the well-to-do. A popular publication such as the *ILN* had a much larger circulation and audience than the selective Society papers, and the inclusion of illustrations made it visually obvious, and very public, exactly who was being discussed. Thus public figures of the day were brought directly into the private homes of the readers. Private information became a public commodity.

Some connections can be made between these developments in public/private perceptions of information during the nineteenth century and the aforementioned expansion of communication, transportation and bureaucratic infrastructures. As the state became more centralised, information gathering and processing became more the norm, literacy levels improved and consumer society introduced new ideas of public ownership. Alongside a greater awareness of the world in general, these all contributed to a blurring of the traditional boundaries between public and private.

Jurgen Habermas developed the notion of the nineteenth century ‘public sphere’ in the early 1960s.⁵⁹⁹ His concept of an arena to allow rational debate involving the public brings us back to the notion of public opinion, discussed in earlier chapters.⁶⁰⁰ In the early decades of the nineteenth century, ‘public opinion’ was the educated and informed classes coming from “time and reflection”⁶⁰¹ of the situation. By the 1880s in discussions of the Channel Tunnel project, while public opinion had become inclusive of the working classes, it remained dominated by the idea of being informed and of having access to

⁵⁹⁸ See Chapter Five *Periodical Knowledge*, p. 149-150.

⁵⁹⁹ Habermas (1962)

⁶⁰⁰ See Chapters Three, *Individual Perceptions*, pp. 56-63, and Six, *Panic and Awareness*, pp. 182-199.

⁶⁰¹ *Letter to a noble lord...* (1831), p. 33.

rational and ordered information. Publicly available information would allow every man to “judge for himself of the objections made to the Tunnel.”⁶⁰²

As Webster has summarised:

In the public sphere... people may get access to the facts, may calmly consider and reflect upon them, and thereby *rationally* decide on the most appropriate course of action.⁶⁰³

This suggests that public information is perhaps more factual, more rational, than private or personal information. The conceptual theory of the public sphere is supported by this doctoral research. Nightingale’s emphasis on statistics and lament over public “enthusiasms without facts,”⁶⁰⁴ is a very good example of information being made public so that a rational decision could be made. Although the topic of sanitation reform and the conditions in the Crimea had a strong emotive value, the information Nightingale used to present them was informative and rational. In the same chapter, it was shown that the news information Julius Reuter sold to the newspapers was pitched as objective observation rather than analysis or commentary.⁶⁰⁵ And, in Chapters Five and Six, the study of *The Penny Magazine* and the *Illustrated London News* saw that much of the information they published publicly, was perceived as rational, useful or scientific, while a large proportion of the information presented in the Channel Tunnel debates was scientific, rational and made up of “well established facts.”⁶⁰⁶

A further aspect of Habermas’ vision of the information society and public sphere is the notion that more information is not necessarily better information. He argues that our

⁶⁰² Potter (1882), p. 23.

⁶⁰³ Webster (2005), p. 163.

⁶⁰⁴ London Metropolitan Archives, Florence Nightingale Collection HL/ST/NC3/SU/169 – Letter from Florence Nightingale to Maude Verney, 23 February 1897.

⁶⁰⁵ See p. x of *Individual Perceptions* chapter.

⁶⁰⁶ Hawkshaw (1882), p. 11.

contemporary information society is in some way more impoverished than the nineteenth century, in terms of the quality of its information, because it has been diluted through media, propaganda and political spin. Although, as Webster has suggested, it is hard to maintain this view when considering the majority of nineteenth century Britons did not have the vote, nor the literacy levels of today.⁶⁰⁷ However, the previous chapters have shown a regularity of awareness that information should be accurate and authentic and this is worth considering further.

Information that is personal or private does not come under the same scrutiny as information in the public domain. During the nineteenth century, both audiences and authors became more sophisticated in this field. The *ILN* publicly sold itself on being accurate, “objection information – up-to-the-minute, full, worldwide, and above all true,”⁶⁰⁸ while in private, illustrator Henry Vizetelly wrote in his autobiography that “not even a single authentic engraving in the opening number derived from an authentic source!”⁶⁰⁹ The pride that Reuter had taken in the 1850s to give accurate, objective news information, by the end of the century, had to operate alongside other telegraph-reporting which was less vigilant. Since some telegraph reports were speculative but sent with news as news to the papers, “the reader often takes that for veiled information which is merely speculative.”⁶¹⁰ The Channel Tunnel debates provoked calls that the nation had “a right to know the worst, honestly and fully told”⁶¹¹ in the public domain, as opposed to the information being secreted in private government reports. There was certainly a degree of propaganda by those both for and against the Tunnel providing a sense of the filtering of information that Habermas discusses as being so prevalent in the twentieth century.

⁶⁰⁷ Webster (2005), p. 198.

⁶⁰⁸ Leps (1992), p. 96.

⁶⁰⁹ Vizetelly (1893), p. 237.

⁶¹⁰ Greenwood (1897), p. 714.

⁶¹¹ Forbes (1880), p. 191.

The application of Habermas' theories supports the idea of some continuity from the nineteenth century to the contemporary information society. It is arguable that during the 1800s the public perception of information moved for the first time towards what we would understand as a modern conception. That said, nineteenth century perceptions were not the same as ours; for a start, the abstract concept of information and this dichotomy of public and private information, were still in their early stages and would take several decades to become fully established. Even in our contemporary society there remains a sense of blurring between notions of public and private information, such as data protection and freedom of information, public access to paedophile registers, open access debates and concerns over a centralised NHS database of private records. The issues being discussed may be new, but the concept of an explicit distinction between public information and private information first emerged during the nineteenth century.

7. 4 Conclusion Three: Peoples' right to information and the valuation of content

An increased consciousness of information as a thing and a distinction between public and private information helped to facilitate a public awareness of their own *right* to information. It is difficult not to make generalisations here, but there are some trends which appear to repeat across each chapter and which support this notion. In focusing on perceptions of information with specific regard to the people, or the public, of England, it is argued that information became more democratised; the public recognised their right to have it and the government recognised the importance of an informed electorate. The power of information to manipulate, to inform and to persuade, also became more explicitly recognised. However, alongside this, the distinction between superficial and profound knowledge remained blurry. Value judgments on the content of information were made, but the reality seems to have been much more fluid and dynamic.

Of course, opinion was not homogeneous in any part of the century and these views, while representative of some parts of society, did not necessarily speak for all. However, the difference in attitude is striking enough to suggest that some changes in society's

perceptions of information had taken place during the fifty years between the Reform Act agitations of the 1830s and the Channel Tunnel panics of the 1880s.

As Prime Minister and leader of the Government Wellington demonstrated a very particular attitude towards information for the people during the build up to the Reform Act in the early 1830s. By juxtaposing these views with the 1880s Channel Tunnel panics, some interesting themes begin to emerge. In both cases there was a recognition that information could be used to manipulate and exacerbate public opinion. However, while Wellington feared the “propagation of falsehoods” and “the ill-informed and mischievous” public,⁶¹² by 1882 *The Times* was arguing that information on the Channel Tunnel project “has been so much before the public that it was natural that the Government should be questioned as to their views or intentions.”⁶¹³

Fear and anxiety remained present during the 1880s and many of the commentators against the Tunnel employed language similar to the mob rhetoric of the 1830s. The difference was that the Channel Tunnel threat came from without; it was a fear of invasion and seizure rather than concern for internal working class revolution. While *The Spectator* may have expressed concern about the “recurrent panic”⁶¹⁴ that the Tunnel would provoke in the public, these panics were regarded as a united England, fearing an external threat of invasion. This was quite different to the view that, “the public mind... once unsettled is not easily quieted, but more frequently acquires a restlessness, which getting beyond human control, rapidly overturns all existing institutions”.⁶¹⁵

As discussed in Chapter Six, *Panic and Awareness*, the relationship between the public and the governing classes had changed;⁶¹⁶ by the latter decades of the century, the public

⁶¹² Guedalla (1931), p. 369; Southampton University, Hartley Library – Wellington Pamphlet 1194/12, *A Letter to a Minister of State Respecting Taxes on Knowledge*, 2nd edition, 29 January 1831, London.

⁶¹³ *The Times*, 15th February, 1882, p. 9.

⁶¹⁴ See for example, *The Spectator*, No. 2797, 4th February 1882, p. 148; and, *The Spectator*, No. 2799, 18th February 1882, p. 225.

⁶¹⁵ *Letter to a Noble Lord...* (1831), p. 8.

⁶¹⁶ See Chapter Six, *Panic and Awareness*, pp. 164-202.

had become more of a validating force of government opinions, rather than an *agent provocateur*. In part, this was down to rises in education, in literacy and in the popular press, which facilitated understanding and the logistics of being informed.

This notion of “informing or apprising,” “instruction, advice,” or “reading or instruction... gathered in any way,”⁶¹⁷ was a powerful one and can be linked back to the nineteenth century dictionary definitions and the semantics of information discussed in Chapter Three, *Individual Perceptions*.⁶¹⁸ This power of information to manipulate, to inform and to persuade, arguably became more *explicitly* recognised over the course of the century.

By the 1880s both those in favour of and those against the Channel Tunnel showed an awareness of this power of information. More than that, the public themselves seemed increasingly aware that they had, or at least ought to have, a *right* to information and to be informed about events. Unlike the 1830s where the public right to information had centred around taxes on knowledge and on an informed people being a dangerous one, by the time of the Tunnel debates, commentators were arguing that the people had “a right to know”⁶¹⁹ and of the significance of the “knowledge of the public.”⁶²⁰

The 1880s were by no means the first time that this had happened. Certainly, the power of information to inform and persuade had also been recognised by Florence Nightingale and Eleanor Sidgwick. Both had collected statistical information in order to argue a more emotive case, those of sanitation reform and women’s education. As discussed previously, for Nightingale, information *required* a purpose – its independent existence was only validated by a cause, thus “information... remained useless... [if]... it was

⁶¹⁷ *A dictionary of the English language* (1859, 1863, 1878), p. 752; *Johnson’s dictionary of the English language...* (1871), p. 1257; *A concise dictionary of the English language...* (1894), p. 356.

⁶¹⁸ Also see Weller & Bawden (2006), pp. 138-139.

⁶¹⁹ Forbes (1880), p. 191.

⁶²⁰ Potter (1882), p. 23.

unused.”⁶²¹ Sidgwick had a similar, if less explicit, view, using private information to promote a public cause, but collecting that information specifically to advance the call for university education for women. This call itself expressed an explicit recognition that being informed and being educated was necessary to change and develop the role played by women in society. Thus publicly provided information could unequivocally serve to facilitate “the development of an alert intelligence, a scientific spirit, [and] a habit of independent thought” in private.⁶²²

Etiquette literature is an example of a whole genre of publication where information was being bought and sold with the explicit claim to educate, change and regulate behaviour, “for those who *do not know*,”⁶²³ in the hope that it would “refine or improve” behaviour and understanding.⁶²⁴ This recognition of the power of information was thus something that was happening in both the public and private sphere – in public argument and protest and in private homes and behaviour.

As nineteenth century audiences became more sophisticated, so did their perceptions of the information to which they had access. The awareness that they had a right to be informed developed gradually, since access to and independent recognition of information remained somewhat of a novelty during the 1800s. This led to a fluid and dynamic attitude towards the actual content of information. For the first half of the century at least, “it was not in the experience of the ... Victorians to expect or demand the sort of authenticity or accuracy” that would come by the end of the century and into the twentieth.⁶²⁵ Therefore, whilst value judgements were made, there was also a great deal of blurring between what constituted valuable and significant information and that which was superficial or erroneous.

⁶²¹ Herbert (1859), p. 7.

⁶²² *Report of the proceedings of the opening of King Edward's School* (1896), p. 6.

⁶²³ Day (1836), p. 3.

⁶²⁴ *The book of fashionable life...* (1845), p. 11.

⁶²⁵ Grogg (1977), p. 47.

That there was some recognition of the importance of accurate and correct information is evident. In 1852 *The Times* was commenting that the “first duty of the press is to obtain the earliest and most correct intelligence of the events of the time, and [disclose] them to make them the common property of the people.”⁶²⁶ The preface to the *ILN*’s first issue in 1842 publicly promised “substantial reality,” “treasures of truth” and to teach [the scholar] the truth about those who have gone before him.”⁶²⁷ In a letter to Nathan Rothschild in 1850 regarding a possible business contract, Julius Reuter wrote that his company could “**guarantee** the accuracy of [the] information” sent.⁶²⁸ Indeed, the information provided by the Reuters Company was ultimately so trusted by 1900 that it coined a new dictionary word, ‘Mafficking,’ meaning to riotously rejoice, following a Boer War report.⁶²⁹ During the Channel Tunnel panics, there were recurrent calls for full, accurate and open information.

However, others demonstrated a very strong awareness of the *inaccuracy* of information available to the public. Chapter Five, *Periodical Knowledge*, showed how the editors of the *Illustrated London News* promised true representations in their illustrations but often ended up using modified existing images, or an illustrator’s interpretation of a text. As Grogg has also argued, it was “generally the practise to build the text around the illustration rather than the reverse.”⁶³⁰ One contemporary defended this approach by suggesting that to an audience, “does not one riotous crowd resemble another, and are not flames and smoke nineteen-twentieths of a good fire picture?”⁶³¹ Like *The Penny Magazine*, the *ILN* copied most of its news information from daily papers and by citing them as the source, denied all responsibility for the accuracy of its content.⁶³² Some

⁶²⁶ *The Times*, 6th February 1852, p. 4.

⁶²⁷ *ILN*, No. 1, Vol. I, March 14th, 1842, p. 1.

⁶²⁸ Letter from Paul Julius Reuter to N.M. Rothschild, 27th April, 1850 - [Reuters Archives LN695/1/962632](#). The word “guarantee” in bold is as it is in the original letter.

⁶²⁹ Jeans (1928), p. 414; Bailey (1996), pp. 18-19. Oxford English Dictionary (2001), p. 180. Original Reuter’s reference – [Reuters Archives LN1 860313; LNI 860314](#).

⁶³⁰ Grogg (1977), p. 80.

⁶³¹ Spielman (1892), p. xii; Knight (1864), Vol. III, p. 246.

⁶³² See *ILN*, 22nd October, 1842, p. 374; and *ILN*, 27th September, 1845, p. 198.

scholars have pointed to the fact that many middle class authors of etiquette literature could not possibly have had access to the upper echelons of society that they wrote about⁶³³, a fact which caused contemporary literary critic William Hazlitt to scurry one silver-fork author with the taint that, “Mr. Hook has a fellow-feeling with low life or rather with vulgarity aping gentility, but he has never got beyond the outside of what he calls good society.”⁶³⁴ In addition, as seen in Chapter Four, *Etiquette and Behaviour*, the repetition of content perpetuated any inaccuracies, serving to promote them as truth.

This was also the case with some news articles. As much as Reuter prided himself on the accuracy of information provided, other instances suggested that telegraphed items (not necessarily from the Reuter Company, it should be said) were open to a different interpretation. In one article on the newspaper press in 1897, Frederick Greenwood argued that speculative articles from abroad could be “telegraphed, and because they are printed with news as news... the reader often takes that for veiled information which is merely speculative.”⁶³⁵ Chapter Six, *Panic and Awareness*, illustrated how in a time of public panic and debate, such as the Channel Tunnel agitations of the 1880s, concern over inaccurate or undisclosed information could become hugely augmented.

Over the century, as information became not only more publicly available, but also more recognised as a valuable entity in itself, value judgments were beginning to be made over its content. However, there remained blurred boundaries between what was deemed correct and significant and that which was misleading or superficial. Perceptions of information were fluid and dynamic, and the distinctions between ‘accurate’ news and ‘inaccurate’ sensation or fiction were often unclear, particularly when operating on a cultural level. The concept of information was becoming valued and recognised in a new way, but had not yet become as sophisticated as it would during the twentieth century.

⁶³³ Davidoff (1973), pp. 18-19; Hughes (1992), p. 329.

⁶³⁴ Hazlitt (1934), Vol. 20, p. 147.

⁶³⁵ Greenwood (1897), p. 714.

7.5 Conclusion Four: Visual Information

Another theme that has repeatedly appeared across the previous chapters is the notion of what I have termed ‘visual information.’ That is, information that can be understood or read from illustrations, diagrams or visual clues or images. The concept of a visual culture was not new to the nineteenth century, with graphic satire and woodcuts being popular pastimes for the upper and lower classes during the eighteenth century for example, and the image in history being discussed by historians Roy Porter and Peter Burke.⁶³⁶ In a different context, Edward Tufte has also discussed the idea of visual representation in information science, questioning why “the flow of information [should] be broken up into different places on the page because the information is packaged one way or another?”⁶³⁷ Certainly it could also be argued that visual perception of information may not lead to the same conclusions as textual or numerical presentation, but so far as this affected nineteenth century perceptions of information, this is an area for future research.

Visual information in nineteenth century England can be seen as a two-fold phenomenon:

- Statistics and factual information are used to create a visual ‘picture’ for the reader.
- Diagrams and step-by-step illustrations provide information in a new form.

These phenomena are not mutually exclusive and often overlap. They also have interesting implications for the cultural and social study of information, not least that they can help us to examine changing perceptions from a new perspective. Visual culture is irrevocably tied up with context and meaning. There are the usual dangers associated with any study of the image, such as making superficial observations, misinterpreting the artist’s intention, or making unsubstantiated assumptions that it is harder to do when dealing with the written word. However, the purpose here is not to ‘read into’ any images

⁶³⁶ See Porter (1998); Burke (2001); and, Gatrell (2006).

⁶³⁷ Tufte (1983), p. 181.

in depth, but rather to examine the themes and trends that have appeared across each of the chapters in order to explore nineteenth century perceptions and understandings of information. A detailed study of visual information is the place for another research project, particularly dealing with questions of intention and consequence. However, the early validity of these points can be supported by some examples from the previous chapters.

As discussed in Chapter 3, *Individual Perceptions*, the concept of presenting statistics visually was not entirely new to the 1800s, although it was still in its infancy. Early bills of mortality during the seventeenth century could be regarded as tabular ways of presenting facts. William Playfair's 'pie charts' of the 1780s, Dr John Snow's presentation of cholera outbreaks in London, September 1854, through a visual mapping of deaths in relation to water pumps, and the French engineer Charles Joseph Minard's *Carte Figurative* of Napoleon's Russian campaign in 1812-1813 were steps in "conveying ideas... through the eye."⁶³⁸ Florence Nightingale demonstrated the significance of visual information in convincing the Government of the need for sanitary reform in the army. The ease of understanding through these visual representations also allowed the public to really grasp the full impact of, in Nightingale's case, how sanitation could induce or prevent disease and mortality.

Such visual information was not common, even by the end of the century. Eleanor Sidgwick for example did not use the personal statistics she had collected on the Newnham College girls to create an easily accessible graph or chart. Rather, as has been shown, she published them as one hundred pages of complicated tables. The reason for this could be speculated as being because a more visual representation would have more clearly showed the holes in the figures, caused by inaccurate survey responses or biased answering. In which case, it would not have been in her interest to make the statistics more readable. It is possible to conjecture that Sidgwick was aware of the power of clarity of visual information and the lack of graphical representation was, in this case, a deliberate choice.

⁶³⁸ Playfair (1786); Snow (1855); Robinson (1967). Quote from Nightingale (1858a), p. 1.

What does seem to have happened during the nineteenth century is the democratisation of this kind of visual statistic, where information became more popularly accessible and understood by a wider audience. This helped change the way in which information was understood and disseminated. The technology of the 1800s allowed printing to become more accessible and the later development of photography completely changed the way images and visual information were used. Mayhew's study of London describes how a man, who could not read, used illustrations and images as a prop, "just that he might learn from some one, who *could* read, what it was all about."⁶³⁹

Examples of visual information are strong in etiquette literature and within the popular publications of the *ILN* and *The Penny Magazine*, and it was still being used to great effect during the Channel Tunnel panics of the 1880s. This type of visual information is one we see much less of in our contemporary society; since images are now so ubiquitous and accessible, there is little need to add to them with written descriptions. However, in the nineteenth century, when the technology for creating and distributing images and illustrations was only just beginning to develop, such richness of information detail in text was much more prominent, as were diagrammatic and 'step-by-step' instructions. It was these latter examples of visual information that were particularly new to the 1800s.

In 1791 Trusler published *The honours of the table, or, rules for behaviour during meals* which had a section dedicated to carving, describing not simply the idea of carving but which also used detailed engravings to illustrate physically *how* to make the best cuts of meat and poultry. For Trusler, "those that have long been accustomed to [carving]... cannot make the rising generation a more useful or acceptable present, than to teach them to acquit themselves well, in the discharge of this part of the honours the table."⁶⁴⁰

Decorum aside, the information presented was eminently practical. The illustrations were marked with dotted lines showing where cuts should be made and which joints were which. There were descriptions of how to hold joints when carving and the direction from

⁶³⁹ Mayhew (1861-1862), Vol. I, p. 25.

⁶⁴⁰ Trusler (1791), p. 23.

which to cut. The instructions covered almost every eventuality including (but not limited to) leg saddle, shoulder of mutton, leg of pork, spare-rib of pork, bone of beef, breast and knuckle of veal, half a calf's head, a ham, a haunch of venison, ox tongue, roasted pig, hare, rabbit, goose, pheasant, pigeon, cod's head and salmon.

Isabella Beeton's *Household Management* of 1861 also used diagrams to illustrate the logistics of carving (see fig. 13, p. 224). *Family Etiquette* of 1876 included a similar, if less comprehensive, section, which also used diagrams to facilitate explanation of how carving should be done correctly.⁶⁴¹ *The habits of good society*, a dense volume with a lengthy philosophical introduction, shared the same belief that carving was a skill to be learnt in order to enjoy society to its fullest and one upon which etiquette could provide helpful information. Instruction on how to carve, which joints to serve for the best taste and even the best knives to use for carving and serving were explained to its audience, covering a selection of dining possibilities including roast beef, boiled beef, mutton, lamb, fowl, partridge, and even "animals served whole."⁶⁴²

⁶⁴¹ Beeton (1876), pp. 28-31.

⁶⁴² *The Habits of Good Society* (1859), pp. 222-29.

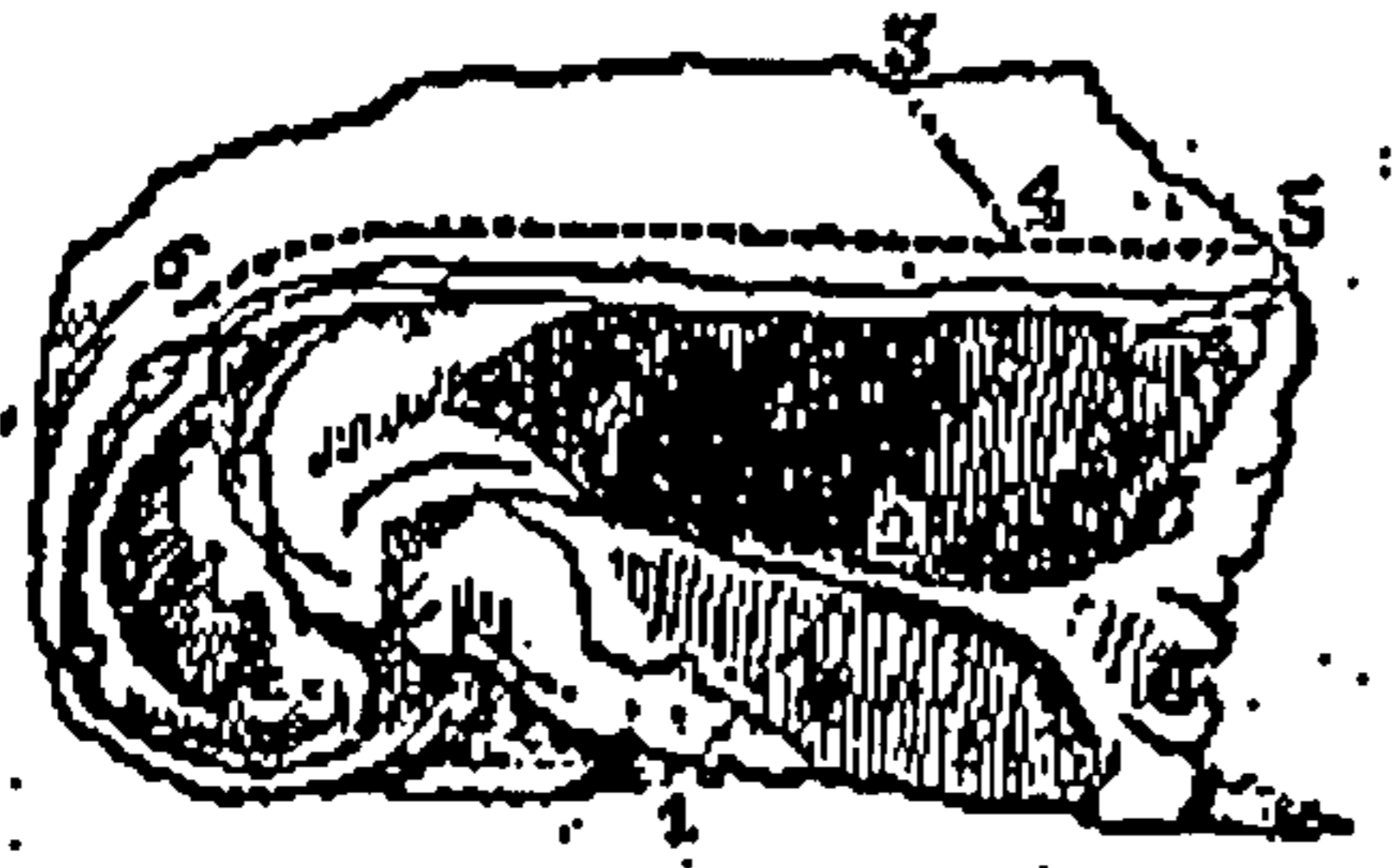


Figure 13: How to carve beef, in Beeton (1861), *Book of Household Management*, Ward-Lock, London.⁶⁴³
 Note the numbered parts of the joint, which correspond to the explanatory text:

“...the carver himself may raise the joint, and cut some slices from the under side, in the direction of from 1 to 2, as the fillet is very much preferred by some eaters. The upper part of the sirloin should be cut in the direction of the line from 5 to 6, and care should be taken to carve it evenly and in thin slices. It will be found a great assistance, in carving this joint well, if the knife be first inserted just above the bone at the bottom, and run sharply along between the bone and meat, and also to divide the meat from the bone in the same way at the side of the joint. The slices will then come away more readily. Some carvers cut the upper side of the sirloin across, as shown by the line from 3 to 4; but this is a wasteful plan, and one not to be recommended.”

As well as being able to carve and appreciate wine, a gentleman or lady should also have certain accomplishments, such as riding where etiquette explained, “the chief rules are:

Sit upright, but not stiffly, and well back in the saddle; stick the knees into the sides thereof, and keep the feet parallel to the horse’s body, the toes turned in rather than out. The foot should be about half-way in the stirrup, which in rough riding may be allowed to slip down to the hollow of the foot.⁶⁴⁴

Similar detailed visual information could be found to describe the steps and music of dances, ranging from two pages of instruction in the 1859 *The habits of good society* to a more comprehensive 1857 *Ball Room guide* supplement which contained eight pages of

⁶⁴³ Beeton (1861), ch. 13, p. 677.

⁶⁴⁴ *The Habits of Good Society* (1859), pp. 197-98.

ball room behaviour, followed by a twelve page literal step-by-step guide as to how to *do* each dance, providing “an analysis in detail” of popular dances.⁶⁴⁵

The Penny Magazine also provided such information in its monthly supplements on different industries. Here illustrations were provided of various machinery and techniques, but they were accompanied by a very descriptive text that conveyed information on how the machine would work and what its purpose was, as has been shown in Chapter Five. This development of “the visual explanation of technical processes became a staple of illustrated journalism.”⁶⁴⁶ The same sort of technical visual information was being used in the 1880s when describing the machinery of the Channel Tunnel and was used by both newspapers as prominent as *The Times* and by contemporary engineers.

This sort of visual imagery created through the written word was made possible because of the style and detail of the information being provided. The text was not simply a description of a picture (where there was one), nor was it a bland description of an event or item. Rather, the text and image took on a mutual value that became a powerful tool for conveying information to an audience that had increased in number, literacy, interest and demand. The image is now so common that it has lost much of its value, but, in the mid-nineteenth century, visual information became an important form of popular cultural representation.

7.6 Dissertation Contributions to Knowledge In Summary

The course of this research has raised some interesting issues about how information can begin to be understood differently by historians and information science scholars. It has argued that the nineteenth century was a period of change, the beginnings of what we would term a modern perception of information, but that the change was gradual and co-existed alongside other ideas and attitudes for much of the century. By taking a long view

⁶⁴⁵ *The Habits of Good Society* (1859), pp. 200-120; *Etiquette for Ladies* (1857), p. 6.

⁶⁴⁶ Maidment (2001), p. 145.

and examining a variety of decades, events, and individuals, as has been the methodological approach here, it has been possible to identify some of the emerging and recurrent themes in nineteenth century England.

It has been shown that information became increasingly understood as an abstract thing or idea in its own right. Whether this was purely conceptual, or embedded within a material artefact, made little difference to the fact that people became more explicitly aware of 'information' as an end in itself.

Also, the research suggested that during the nineteenth century people became more aware of their *right* to information and their *right* to be informed. This was not limited to a particular kind of information or to a particular group of society. Rather, it was a gradual social realisation that information, being recognised as something in its own right, should be democratised and available and this view became increasingly socially acceptable as the century progressed.

Furthermore, as social awareness of information grew, so too did the notion of *public* information and vis-à-vis, the significance and value of *private* information. The two spheres became increasingly defined during the 1800s, although there remained much fluidity and dynamism between them throughout.

Finally, information became increasingly expressed explicitly through image as well as through text; or through 'visual information.' This visual information differed from that which had gone previously in the eighteenth century and earlier, because it focused largely on diagrammatic and instructional images that were supported by descriptive text. This 'visual information,' as I have termed it, was also more publicly available to a much wider audience and as it became more accessible, it also became more accepted in everyday life as a cultural medium.

At the beginning of this chapter it was observed that, “perceptions change with experience; and perceptions are context dependent.”⁶⁴⁷ Information is not a static entity or idea. Nor is information an ahistorical, heuristic analytical category, but as this research strongly demonstrates, it is a category that was made and remade in highly relevant ways during the nineteenth century. If society changed its relationship with and perception of information so significantly during the nineteenth century, then it does not seem so great a leap to suggest that it has also done so at other times. Information history is a valid and powerful tool in the continuing understanding of the role information does and has played in society and this doctoral research demonstrates the challenges it can make to accepted notions of our *own* perceptions of information. This research will have served a significant purpose if it can hone the scholarly questions asked in the future and challenge traditional views of information held both by historians and by information scientists.

The final chapter will assess the extent to which the research questions have been answered and it will demonstrate the significance of the conclusions discussed here to contemporary information scholarship.

⁶⁴⁷ Tufte (1983), p. 56.

Chapter 8

Assessment, Evaluation, and Future

This final chapter discusses the extent to which the research questions have been answered and demonstrates the significance of my doctoral conclusions to contemporary information scholarship. It also suggests some ways in which this research and information history, more generally, could be taken forward to develop what has been discovered and discussed in the previous pages.

8.1 Assessing the Research Questions

The research questions were answered successfully, although inevitably the research raised even more questions. Based upon the original questions and aims, my research can be seen as a genuine contribution to an interdisciplinary study. As all of the chapters have demonstrated, existing historical knowledge has been built on and challenged, as well as existing information science scholarship. Chapter Four, *Etiquette and Behaviour*, for example, challenged existing notions of the role of etiquette literature simply as a behavioural guide, while also challenging the notion that a crisis of control was only occurring in business and technological arenas during the nineteenth century. Chapter Three, *Individual Perceptions*, challenged the chronology of the information society, something recognised by recent scholarship in this area.⁶⁴⁸

Much of this research has been presented at conferences or seminars with audiences consisting of historians and of information scientists and was received with interest by both. It has also been published in academic journals and contributed to a very real cross-discipline debate on information history, which has manifested as a proposal to the AHRC for funding for an international and interdisciplinary information history workshop (discussed more fully below).

⁶⁴⁸ Black *et al* (2007), pp. 238, 241.

The second research question aimed to explore what was understood by the notion of information in the nineteenth century and whether this changed or remained constant over the period. What this work has certainly demonstrated is that information was perceived in multiple ways and that a pluralistic approach should be taken when examining information historically. It may be supposed from this that information may have had a complexity of meanings in other periods of history and, if so, this is worth exploring. As has been suggested in Chapters Three, *Individual Perceptions*, and Seven, *Bringing it all Together*, the nineteenth century in England saw a change towards what we would understand as modern perceptions of information, distinct from what may have gone before. Indeed, the research suggests that such perceptions of information were idiosyncratic to the nineteenth century.

As to whether these understandings changed over the nineteenth century, one could argue strongly that they did, such as the example of etiquette or the dichotomy between 1832 and the 1880s as Chapters Three and Six demonstrated. Having said that, it is not possible to give any precise dates on when things changed since there were so many multiple, overlapping and co-existing perceptions. Indeed it would be far too simplistic to suggest any such arbitrary date. This in itself is an important realisation; we cannot impose such chronological markers on the past for the very reason that information is such a dynamic and fluid concept, just as it is in our own contemporary society.

Regarding my speculation as to whether a socio-cultural focus could provide alternative readings of the Victorian information society, the answer is a resounding yes. As discussed in Chapter Two and throughout the work, scholarly work on the nineteenth century information society has to-date been dominated by discussion of the technological, the organisational and the bureaucratic. Even more so, social and cultural *sources* have hitherto tended to be overlooked, or at least, not examined in the way they have been in this research. By examining social and cultural perceptions of information, debates on the chronology and origins of the information society are broadened and enriched. Although this research is far from exhaustive, it provides enough answers and

raises enough new questions to spark a fresh examination of the Victorian information society.

It can be argued with some force that there are both continuities and changes between perceptions of information in the nineteenth century and in our own society. What the research has demonstrated though is that perhaps the continuities and changes were not those expected. The single most important point to make here is that information itself, as a concept and as something embedded as a cultural artefact, was perceived and understood differently to the twenty-first information society.

The difference between the late eighteenth century and the late nineteenth century perceptions are in some ways more significant than anything. There was a distinct shift in understanding of information during the 1800s, which was related to broader developments in politics, technology, industry, literacy, bureaucracy and foreign affairs, and which marks a shift from pre-modern to modern perceptions of information. The socio-cultural perspective has to date been largely overlooked and this research therefore presents a challenge to the current chronology of information society scholarship.⁶⁴⁹

Questions on the way in which information was received and disseminated, the historical context and the governmental and media use of information, have all been addressed by this research. All the chapters closely related the sources to contemporary events, political, economic, social, and foreign policy, where relevant, to give as full a sense as possible of the environment that was shaping perceptions. Information is not perceived in a vacuum and this research has strongly demonstrated how interrelated cultural and social understandings of information are with the wider historical context.

Government and media perceptions of information have been touched on through Chapters Five and Six, although this is more related to social and cultural understandings of information, rather than political or media understandings *per se*. Since much has

⁶⁴⁹ Black *et al* (2007), pp. 12, 238, 241.

already been written on nineteenth century media and government, this does not constitute a weakness of this work, but rather hints at other perspectives that could be explored by future information scholars.

8.2 Would I have done anything differently?

In retrospect, I would not have done anything differently. This does not, of course, mean that I did not learn a great deal along the way, rather that the choices I made were considered and thought through. The methodology of using individuals as an introduction to the topic and of then focussing on three different themes in the forms of etiquette, of periodicals and of the Channel Tunnel in the following chapters, proved very useful 'pegs' (an approach often used in studying other historical abstract ideas). This methodology allowed some insightful and significant exploration of nineteenth century perceptions of information. Of course, other themes could have been chosen but that does not make those that were any less valid or less interesting to explore.

The research covered significant historical ground and each of the chapters could have made valid research topics in their own right. The research does not claim to be comprehensive in this sense, but nor did it claim to be from the start. It is a social and cultural exploration of information in the nineteenth century and it is an empirical validation of the information history methodology as defined in Chapters One and Two.⁶⁵⁰

Easily the biggest challenge was that of definition, particularly when working across essentially two different fields – history and information science – that view and interpret such terminology in different ways and give different emphasis to differing parts of the research process. This challenge was dealt with by showing an awareness of the complexities of the literature early on in Chapter One and thenceforth by allowing the

⁶⁵⁰ See Chapter One, *Definitions*, pp. 27-28, and Chapter Two, *Methodology*, pp. 29-47.

sources to speak for themselves as much as possible rather than attempting to fit them into a modern notion or understanding of information.

Some may disagree with this approach, but I have tried to make it as transparent as possible, so my interpretation and my use of sources can be understood. I strongly feel that singular definitions of information are ineffectual historically and that modern contemporary definitions of this sort are not much better. While I understand the necessity of such debates, I would argue that it is all too easy to become subsumed by issues of definition and to miss the much bigger point that information, now, as in the nineteenth century, means different things to different people in different contexts. An exploration and understanding of these contexts is therefore more useful to the information history scholar, and this has been the aim throughout this research.

8.3 The contribution to knowledge – the significance of my research to contemporary information scholarship

As discussed in Chapter Two, historical information scholarship is still developing and has several schools of thought. The research conclusions are dealt with in detail in Chapter Seven, *Bringing it all Together*, but there are some more specific points to make that add to the existing work in this area:

- Etiquette as a form of organic and self-perpetuating social control
- The conscious preservation of knowledge through popular cultural mediums of periodicals
- The development of meta-data cross-referencing techniques in the *ILN* and *The Penny Magazine*, prior to their introduction in public libraries
- The role of what I have termed ‘visual information’, specifically the emergence of diagrammatic images alongside descriptive text
- Information as a cultural commodity as much as an economic one

- The changing perception and role of information by contemporaries during the nineteenth century, as a break from the eighteenth century and pre-modern conceptualisations

This research also contributes to existing scholarship in two significant ways *in addition* to the multiple research conclusions made in Chapter Seven and those above:

- Social and cultural history of information is as valid and significant as the history of information technology or information management, and deserves further exploration
- Information history offers an alternative way to understanding and conceptualising the past
- Challenges existing notions of the information society and its history and origins

The result is to offer a new insight into an established historical period and into an emerging field of study in its own right. Information history is a valid and powerful tool in the continuing understanding of the role information does and has played in society, and this doctoral research demonstrates the challenges it can make to accepted notions of our *own* perceptions of information. This research will have served a significant purpose if it can sharpen the scholarly questions asked in the future and challenge traditional views of information held both by historians and by library and information scientists.

8.4 Taking the Research Forward

This research has opened up numerous opportunities for future scholarly work in this area, some of which expand directly from the work done in the previous pages and some of which explore alternative areas. Some of these are discussed below, although they, by no means, form a comprehensive list of possibilities rising from this work.

Rising from Chapter Three, *Etiquette and Behaviour*, are questions relating to the longer-term trends in behavioural literature. It would be useful to take a more detailed study of

the eighteenth and twentieth centuries to see if any form of social crisis of control was evident in these periods and, if so, how it manifested and how it was regulated. Initial study would suggest that the use of etiquette as a behavioural standard and control mechanism was unique to the nineteenth century since it was part of the broader developments in regulation of state, industry and communication. There is certainly scope for further study of a social application of the crisis of control theory however, and perhaps also interesting to see how forms of etiquette and behaviour in other countries compared to England, where etiquette mediums were fairly distinctive.

On a more contemporary note, such an approach could also be explored with regard to modern twenty-first century society issues. The media and government regularly discuss notions of a decline in social behaviour and responsibility. Does this constitute a social crisis of control and, if so, what is impact of the 'nanny state' increase in regulation and standardisation? There is certainly a case to be made that we are now living in a period of social and political uncertainty and flux, just as there was during the start of the nineteenth century. How does this challenge existing social and cultural infrastructures and to what extent do socio-cultural understandings and manifestations of information reflect this?

The notion of visual information is one that has been touched on throughout the research and is an area that demands further exploration. What might be particularly interesting is to develop upon the ideas expressed in Chapters Three, Four, Five and Six and see to what extent visual information affected the way information was interpreted or perceived by contemporaries. Its role in the development of advertising, public relations and digital media in the twentieth century would also make an interesting project, but again it is argued that this should have a social and cultural focus rather than a political or technological one. We should be asking how people use and understand information when it is in visual form and how the relationship between text and image has developed in cultural terms. It would be interesting to take this concept back, pre-1800, and see how information may have been disseminated or perceived by a society that was much less

literate than our own period. These questions have all been touched on or alluded to in this research, but they deserve further consideration in their own right.

Much more specifically, during the course of this research, some interesting and largely untouched archival material was discovered which would itself make a fascinating study. The most significant of these were the personal index cards held at Newnham College, Cambridge. How common was the practise of measuring girls in this way or was Eleanor Sidgwick alone is her statistical recording? Did other academic institutions, or indeed *any* other institution, adopt similar schemes to help validate female biology? Does any further correspondence exist regarding these particular cards? Who saw them and what was the reaction of the girls themselves to being measured and catalogued? This certainly merits further investigation: to add to the history of Newnham College; to contribute to the nineteenth century fascination with statistical information; and as part of the wider debate on eugenics.

In more general terms, this research was very much centred in England, even more so in London. More studies, which use an information history methodology such as that explored here, but which focus on other parts of Great Britain or her Empire during the nineteenth century, or other parts of the world, would be very useful. In addition to different geographical emphasis, other time periods would be interesting to explore. Information history is certainly not an English, nor a nineteenth century, construct and this is reflected in the very strong library and information history movement in Europe, particularly in Swedish, Danish and Norwegian universities and research institutions.

Where this specific research could add to these existing broader European studies is its argument that contemporary scholarship ought to include *social and cultural* aspects of information, and not just regard information history as a product of modernity or information *technology*. I believe this is vital to the development and richness of the field, and that this doctoral research has really shown a gap in the research arena for this type of socio-cultural information study.

Also, since this research has been a focus on nineteenth century perceptions of information, it would be useful to have some comparative studies from the eighteenth and twentieth centuries. Historical studies can encourage a grand narrative framework and in some ways a socio-cultural history of information may benefit from this, particularly in regard to the conclusions made in Chapter Seven, *Bringing it all Together*. This is not to suggest a Whiggish view of development, but rather that a longer-term view can be useful in providing context and understanding of thematic issues and concerns, not least those in our contemporary society.

Perhaps most significant however is the fact that during the three years of this project, two directly related research undertakings have already been initiated. The first is a book by the author, Toni Weller, of this research discussing the concept and practise of information history, due to be published by Chandos (Oxford) Publishing in mid-2008. The second is a proposal to the Arts and Humanities Research Council to fund an international information history workshop, led by Toni Weller and Edward Higgs, an historian at the University of Essex. That such projects are already underway and are attracting interest from other scholars in the fields of history, in library and information science and in information history, is perhaps the strongest indication of the success and of the significance of exploring social and cultural perceptions of information in nineteenth century England.

9. Bibliography And References

9.1 Archives & Libraries Consulted

Florence Nightingale Museum, London.

Newnham College Archives, Cambridge

Nineteenth Century Collection, British Library, London

Reuters Company Archives, London

Wellington Papers, Hartley Library, University of Southampton

British Library, London

Cambridge University Library, Cambridge

City University Library, London

Guildhall Library, London

Institute of Historical Research, London

London Metropolitan Library

Newspaper Library (British Library), Collindale, London

VICTORIA discussion list

9.1.1 Primary Material (Pre 1900)

9.1.1.1 Unpublished Works

Descriptive cards of Members, 1898-1900. Newnham College Archives.

Letter from G. E. Pagot to Henry Sidgwick, 18 November 1873. Newnham College Archives, Sidgwick Papers, *Letters about... becoming members of the Association.*

Letter from Colonel Sir H. F. Cook to Wellington, n.d. May 1831. Southampton University, Hartley Library – MS 61 Wellington Papers WP1/1184/1.

Letter from Florence Nightingale to War Office from the Barrack Hospital in Scutari, 1 May 1855. London Metropolitan Archives, Florence Nightingale Collection HI/ST/NC8/14/d.

Letter from Florence Nightingale to Maude Verney, 23 February 1897. London Metropolitan Archives, Florence Nightingale Collection HI/ST/NC3/SU/169.

Letter from Miss Anne Clough to Mr. Darwin, 16th December n.d. Newnham College Archives, Letterbook.

Letter from Paul Julius Reuter to N. M. Rothschild, 27 April 1850. Reuters Group Archive LN695/1/962632.

Letter from Wellington to F. Lloyd, 19 October 1831. Southampton University, Hartley Library – MS 61 Wellington Papers WP1/1199/8.

Letter from William Farr to Florence Nightingale, 30 July 1859. London Metropolitan Archives, Florence Nightingale Collection – HOI/ST/NC/15/11/002a.

Rules of Common Action, 1870: Havas, Reuters and Wolff (Continental Telegraph Companie). Reuters Group Archive LN248/1/880244.

Telegraph Books, Vol. 1, 1854-1881. Reuters Group Archive.

9.1.1.2 Published Works

A German opinion on the projected Channel Tunnel (1882), London. Translated verbatim by T.J. Denne from the original, *Militar-Wochenblatt* (30) 1882.

A letter to a Minister of State respecting taxes on knowledge (1831), 2nd edition, 29 January, London.

Annadale, Charles (Ed.) (1894), *A concise dictionary of the English language, etymological and pronouncing, literary, scientific, and technical* (1894), Blackie & Son Ltd, London.

A prospectus (1829), The Society for the Diffusion of Useful Knowledge, W. Clowes, London.

Banks, Abraham (1839), *Medical etiquette; or an essay upon the laws and regulations, which ought to govern the conduct of members of the medical profession in their relation to each other. Compiled exclusively for the profession,* Charles Fox, London.

Baxter, Robert (1868), *National income: the United Kingdom,* Macmillan, London.

Beeton, Isabella (1861), *Mrs. Beeton's book of household management: a guide to cookery in all branches,* Ward Lock, London.

Beeton, Samuel Orchart (1876), *Family etiquette: a complete guide to conversation, parties, travel, and the toilette, with hints on domestic affairs*, Ward, Lock, and Tyler, London.

Berney, Thomas Rev. (1882), *The battle of the Channel Tunnel and Dover Castle and forts, a letter to the Right Honourable W.M. Ewart Gladstone, M.P., first Lord of the Treasury*, London.

Beaumont, Frederick (1882), The Channel Tunnel. A Reply, *The Nineteenth Century*, LXI (11), pp. 305-312.

Bibliotheca Londinensis: A classified index to the literature of Great Britain during the thirty years arranged from and serving as a key to The London Catalogue of Books, 1814-46, which contains the title, size, price and publisher's name of each work, (1848), Thomas Hodgson, London.

Boughey, A.H.F. (1897), The universities and the education of women, *The New Review*, May, XVI (96).

Boyd-Williams, W. (1883), The 'silver streak' and the Channel Tunnel, *The Contemporary Review*, 43 (Feb), 240-249.

Brabourne, Lord (1882), The Channel Tunnel, *The Contemporary Review*, 41 (March), 522-540.

Bramwell, Frederick (1883), *The Channel Tunnel*, a lecture delivered at the Leeds Literary and Philosophical Society, 20th February 1883, W.M. Clowes & Sons, Ltd, London.

Bright, John (1883), *The Channel Tunnel and industrial opinion. Deputation of English workmen to Paris*, William Bassett, London.

Bulwer-Lytton, Sir Edward (1833), *England and the English*, Routledge & Sons, London.

Bury, Viscount (1882), The Channel Tunnel, *The Nineteenth Century*, May, 668-671.

Butcher, John (1847), *Instructions in etiquette, for the use of all; five letters on important subjects, exclusively for ladies; and conversational hints to whom concerned*, 3rd edition, Simpkin, Marshall, & Co., Nottingham.

Carlyle, Thomas (1831), *Sartor resartus: The life and opinions of Herr Teufelsdröckh*, London.

CD.DO. (1882), *The Channel Tunnel. A true view of it! Regarded as a great whole (for popular use)*, Hamilton, Adams & Co., London.

Chesterfield, 4th Earl of (Stanhope, Philip Dormer) (1799), *Lord Chesterfield's advice to his son, on men and manners, etc. (a new edition, to which are now added, Lord Chesterfield's maxims for young gentlemen)*, R. Sammer, Vienna.

Combe, George (1840), *Moral philosophy; or the duties of man considered in his individual, social, and domestic capacities*, London.

Court etiquette; a guide to intercourse with royal or titled persons, to drawing rooms, levees [sic], courts, and audiences, the usages of social life, the formal modes of addressing letters, memorials and petitions, the rules of precedence, the composition of dedications, the conduct of public meetings, and every other formality of business or pleasure. By a man of the world, (1849), Charles Mitchell, London.

Court manual of dignity and precedence. Containing a series ordinum, table of precedence, and chapter on armorial incidents, honorary styles, and chivalrous insignia, (1849), Thomas Bosworth, London.

Crampton, Thomas Russell (1882), *Crampton's system of excavating the Channel tunnel by hydraulic machinery*, London.

Day, Charles William (1836), *Hints on etiquette and the usages of society: with a glance at bad habits, by Agogos (a.k.a. CWD)*, 2nd edition, Longman, Hurst, Rees, Orme, Brown, Green & Longman, London.

Dickens, Charles (1854/1992), *Hard times*, Everyman's Library, London.

Douglas, A.E. (1849). *The etiquette of fashionable life: including the ball room, and the court etiquette of the present day*, Simpkin, Marshall, & Co, London.

Dunsany, Lord Admiral (1881), The 'silver streak', *The Nineteenth Century*, May, 737-755.

Dutton, Thomas (1894), *Domestic hygiene*, Henry Kimpton, London.

England crushed; the secret of the Channel Tunnel revealed: being a literal translation of a secret [fictitious] despatch recently revised and adopted by an August Federal Cabinet (1882), divulged to Vindex, P.S. King, London.

Etiquette for all, or rules of conduct for every circumstance in life: with the laws, rules, precepts, and practises of good society, (1861), George Watson, Glasgow.

Etiquette for gentlemen: with hints on the art of conversation, (1838), 6th edition, Charles Tilt, London.

Etiquette for ladies, being a manual of minor social ethics and customary observances, (1857), Knight and Son, London.

Etiquette, politeness, and good breeding: embracing all forms and ceremonies in the etiquette of marriage, christenings, morning and evening parties, letters of introduction, dinner parties, recognitions, entertainment of visitors balls, concerts, ceremonial visits, dress, manners, salutations, leave-takings. And a variety of model letters, (1870), Ward, Lock, and Tyler, London.

Female poaching on male preserves (1888), *Westminster Review*, 129, 290-297.

Forbes, Archibald (1880), War correspondents and the authorities, *The Nineteenth Century*, January, 185-196.

Forbes, Horace Courtenay (1883), *Shall we have a Channel Tunnel? A lecture*, A. Brown & Co., Aberdeen.

Forth, C. (1883), *The surprise of the Channel Tunnel. A sensational story of the future*, H. Wightman & Co, Liverpool.

Goldwin Smith, Professor (1882), The Channel Tunnel. A civilian's view, *The Nineteenth Century*, March, 333-336.

Grant, James (1871), *The newspaper press: its origins – progress – and present position*, Volume II, Tinsley Brothers, London.

Greenwood, Frederick (1897), The newspaper press, *Blackwood's Edinburgh Magazine*, 161 (May), 704-720.

Greville, Lady Violet (1892), *The gentlewoman in society*, London.

Griffiths, Robert (1887), *Under the deep, deep sea. The story of the Channel Tunnel*, Moffatt & Paige, London.

Guy, Joseph (1832), *Pocket cyclopaedia or epitome of universal knowledge; designed for senior scholars in schools, and for young persons in general*, 10th edition Baldwin & Craddock, London.

Hassell, Joseph (1873), *Lessons in domestic economy for elder girls*, William Collins, Sons, & Company, London.

Hawkshaw, J. Clarke (1882), *The Channel Tunnel*, a paper read before the mechanical section of the British Association for the Advancement of Science, Southampton, 25th August, 1882, Vacher & Sons, Westminster.

Hayward, Abraham (1837) Codes of manners, *The Quarterly Review*, (59), 395-439.

Hazlitt, William (1934), *The complete works of William Hazlitt*, Dent, London.

Herbert, Sidney (1859), *The sanitary conditions of the Army*, London.

How to travel; or, etiquette of ship, road, coach and saddle (1876), Ward, Lock & Tyler, London.

Humphrey, C. E. (1897), *Manners for men*, London.

Jackson, Mason (1885), *The pictorial press: its origins and progress*, Hurst and Blackett, London.

Johnson, Samuel (Ed.) (1755), *A dictionary of the English language*, London.

Johnson, Samuel (Ed.) (1871), *Johnson's dictionary of the English language*, London.

Klickmann, Flora (Ed.) (1898), *How to behave. A handbook of etiquette for all*, Ward, Lock & Co, London.

Knight, Charles (1864), *Passages of a working life during half a century: with a prelude of early reminiscences*, 3 vols. Bradbury & Evans, London.

Knowles, James (1882a), The proposed Channel Tunnel. A protest, *The Nineteenth Century*, April, 492-500.

Knowles, James (1882b), The proposed Channel Tunnel. A protest, *The Nineteenth Century*, May, 657-662.

Knowles, James (1883), *The Channel Tunnel and public opinion*, Kegan, Paul, Trench & Co., London.

Latham, Robert Gordon (Ed.) (1871), *Johnson's Dictionary of the English Language*, London.

Letter to a Noble Lord: On the draught of a new constitution about to be sent up to the House of Peers (1831), Roake and Varty, London.

Levi, Leone (1884), *The Channel Tunnel; extracts from a lecture on British policy with respect to the Suez Canal and the Channel Tunnel*, King's College, London, 11th October, 1883, C.F. Roworth, London.

Mackay, Charles (1887), *Through the long day, or, memorials of a literary life during half a century*, 2 volumes, W.H. Allen & Co., London.

Mackinnon, William (1828), *On the rise, progress, and present state of public opinion in Great Britain, and other parts of the world*, Saunders & Oatley, London.

Mayhew, Henry (1861-1862), *London labour and the London poor*, 4 vols., London

Miles, Alfred H. (1897), *The household oracle a popular referee on subjects of household enquiry including: - house building, buying and renting; house furnishing and decoration; housekeeping and domestic cookery; plain and fancy needlework; home farming, gardening, medicine; law; an epitome of the history of the world and the growth of the human family; the formation of our mother tongue and the rules of English grammar; a dictionary of religions; stepping stones of English history and a sketch of the English constitution setting forth the rights, privileges and duties of the English householder parochial, municipal, imperial; the story of the calendar, standards of weights and measures; arithmetical tables and tables of interest and a ready reckoner; household amusements, games, chess, cards and other indoor games, dancing, swimming, etiquette*, Hutchinson & Co, London.

Mill, James (1826), State of the nation, *Westminster Review*, VI (October), 249-278.

Mitchell, J. (1834), Men and manners. A series of satires, chapter 1, *Fraser's Magazine*, X (July), 97-106.

Mitchell, J. (1834), Men and manners. A series of satires, chapter 2, *Fraser's Magazine*, X (July), 226-240.

Mitchell, William (1896), *House and home: or, the value and virtue of domestic life*, David Bryce & Son, London.

More, Hannah (1797), *Cheap repository tracts*, J. Marshall, London.

Motherly, Mrs. (1859), *The servant's behaviour book; on, hints on manners and dress for maid servants in small households*, Bell & Daldy, London.

Newnham College Register, 1871-1871, Vol. I, 1871-1923, Cambridge University Press, Cambridge.

Nightingale, Florence (1858a), *Mortality of the British Army, at home, at home and abroad, and during the Russian War, as compared with the mortality of the civil population of England, illustrated by tables and diagrams*, Harrison & Sons, London.

Nightingale, Florence (1858b), *Notes on matters affecting the health, efficiency, and hospital administration of the British army, founded chiefly on the experience of the late war*, Harrison & Sons, London.

Nightingale, Florence (1859), *A Contribution to the sanitary history of the British army, during the late war with Russia, illustrated with tables and diagrams*, Harrison & Sons, London.

One hundred and fifty wood cuts, selected from The Penny Magazine; worked, by the printing-machine, from the original blocks, (1835), Society for the Diffusion of Useful Knowledge, Charles Knight, London.

Pemberton, Max (1901), *Pro patria*, Copp, Clark Co., Toronto.

Piozzi, Hester Lynch (1794), *British synonymy; or, an attempt at regulating the choice of words in familiar conversation*, 2 vols., G.C. & J. Robinson, London.

Playfair, William (1786), *The commercial and political atlas*, London.

Playfair, William (1801), *The statistical brevity*, London.

Porter, G.R (1851), *The progress of the nation in its various social and economical relations, from the beginning of the nineteenth century*, 3rd edition, John Murray, London.

Potter, George (1882), *The Channel Tunnel and international progress*, London.

Pridgin, Thomas (1879), *Dangers to health: a pictorial guide to domestic sanitary defects*, Charles Goodall, London.

Report of proceedings, and address of Mrs. Sidgwick, Principal of Newnham College, Cambridge. King Edward's School, Birmingham. Opening of new high school for girls, New Street, 26th November, 1896 (1897), Jones and Son, Birmingham.

Rousseau, Jean-Jacques (1762), *The social contract; or, the principles of political right*, translated by Maurice Cranston (1968), Penguin Books, London.

Sheridan, Richard (1775), *The rivals*, Messrs. Exshaw, Sleater, etc., Dublin.

Sidgwick, Eleanor (1884), *The university education of women*, William Clowes & Sons, London.

Sidgwick, Eleanor (1890), *Health statistics of women students at Cambridge and Oxford and of their sisters*, Cambridge University Press, Cambridge.

Sidgwick, Eleanor (1897), *The place of university education in the life of women*, The Women's Printing Society, London. Originally an address delivered to the Women's Institute on 23 November 1897.

Simmons, Linton (1882), The Channel Tunnel. A national question, *The Nineteenth Century*, May, 663-667.

Smiles, Samuel (1859), *Self-Help*, J. Murray, London.

Smith, Albert (1849), *The natural history of evening parties, with illustrations by Leech*, D. Bogue, London.

Snow, John (1855), *On the mode of communication of cholera*, 2nd edition, London.

Spielmann, M. H. (1892), Art journalism - then and now, *Illustrated London News*, Summer, x-xv.

Swinburne, Algernon Charles (1882), *Tristram of Lyonesse and other poems*, Chalto & Windus, London.

Thackeray, William Makepeace (1855), *The book of snobs*, Bradbury & Evans, London.

The book of fashionable life: comprising the etiquette of the drawing room, dining room, and ball room (1845?), by A Member of the Royal Household, Hugh Cunningham, London.

The English gentlewoman; or, hints to young ladies on their entrance into society, (1845), Henry Colburn, London.

The glass of fashion: a universal handbook of social etiquette and home culture for ladies and gentlemen, by the loungeur in society, (1881), Hogg, London.

The habits of good society: a handbook of etiquette for ladies and gentlemen. With thoughts, hints, and anecdotes concerning social observances; nice points of taste and good manners; and the art of making one's-self agreeable. The whole interspersed with humour illustrations of social predicaments; remarks on the history and changes of fashion; and the differences of English and continental etiquette, (1859), James Hogg & Sons, London.

The Importance of business tact and habit to young men. A short essay delivered in the committee room, Trevor Chapel, to the Young Men's Christian Society, by A Member [of parliament?], (1853), John Wesley, London.

The lady's every-day book; a practical guide in the elegant arts and daily difficulties of domestic life, (1875), Bemrose and Sons, London.

Thomson, Christopher (1847), *The autobiography of an artisan*, J. Chapman, London.

Tristan, Flora (1842), *The London journal of Flora Tristan, 1842; or, the aristocracy and the working class of England*, translated by Jean Hawkes from *Promenades dans Londres*, (1982), Virago Press, London.

Trusler, John (1791), *The honours of the table, or, rules for behaviour during meals; with the whole art of carving, illustrated by a variety of cuts. Together with directions for going to market, and the method of distinguishing good provisions from bad; to which is added a number of hints or concise lessons for the improvement of youth, on all occasions in life*, 2nd edition, Literary Press, London.

Valbert, G. (1882), L'agitation Anglaise contre le tunnel de la Manche, *Revue des Deux Mondes*, 51, 675-86.

Vizetelly, Henry (1893), *Glances back through seventy years: autobiographical and other reminiscences*, 2 vols., Kegan Paul, Trench, Trubner & Co Ltd, London.

Watkin, Edward (1882), *Channel Tunnel. Report of a meeting of the members of the Submarine Continental Railway Company Ltd*, held on 20th January 1882, C.F. Roworth, Chancery Lane.

Wellington, Duke of (1831), *Speech of the Duke of Wellington, on the motion for the second reading of the Reform Bill, in the House of Lords*, John Murray, London.

Whibley, Charles (1897), The encroachment of women, *The Nineteenth Century*, April 1897, Vol. XLI (242) - Newnham College Archives - Sidgwick Papers.

Wilson, George (1880), *Healthy life and healthy dwellings; a guide to personal and domestic hygiene*, J. & A. Churchill, London.

Wilson, Thomas (1816), *A description of the correct method of waltzing*, London.

W. M. (1831), *A letter respectfully addressed to His Grace the Duke of Wellington, by a Whig commoner, on the question of reform*, Roake and Varty, London.

Worcester, Joseph (Ed.) (1859), *A dictionary of the English language*, London.

Worcester, Joseph (Ed.) (1863), *A dictionary of the English language*, London.

Worcester, Joseph (Ed.) (1878), *A dictionary of the English language*, London.

9.1.1.3 Official Reports

The Channel Tunnel. Lord Lansdowne's report presented to the Select Committee of the House of Lords and House of Commons (1883), 10th July, C. F. Roworth, London.

Report from the Joint Select Committee of the House of Lords and the House of Commons on the Channel Tunnel; together with proceedings of the Committee, minutes of evidence, and appendix (1883), London. Parliamentary Papers. House of Commons. Session 1883. vol. 12. no. 248.

Correspondence between the governments of France and England respecting the proposed Channel Tunnel and railway (1875), presented to both Houses of Parliament by Command of Her Majesty, Parliamentary Paper C1206, Accounts & Papers, 31 (1875). *Correspondence relating to the channel tunnel*, London.

9.1.1.4 Journals & Newspapers

Blackwood's Edinburgh Magazine

Fraser's Magazine

Illustrated London News

The Contemporary Review

The New Review

The Nineteenth Century

The Observer

The Penny Magazine

The Quarterly Review

The Spectator

The Times

Westminster Review

9.1.2 Secondary Material (Post 1900)

9.1.2.1 Unpublished PhD Theses

Durham, Shaun Robert (1999), *The Duke of Wellington and the people, 1819-1832*, University of Southampton.

Grogg, Ann (1977), *The Illustrated London News, 1842-1852*, University of Indiana.

Moon, Howard Roy (1968), *The invasion of the United Kingdom: public controversy and official planning, 1888-1918*, University of London.

9.1.2.2 Published Works

Adburgham, Alison (1961), *A Punch history of manners and modes, 1841-1940*, Hutchinson of London, London.

Adburgham, Alison (1972), *Women in print. Writing women and women's magazines from the Restoration to the accession of Victoria*, George Allen and Unwin Ltd, London.

Agar, Jon (2003), *The government machine: a revolutionary history of the computer*, MIT Press, London.

Agar, Jon (2005), Identity cards in Britain: past experience and policy implications, *History & Policy*, <http://www.historyandpolicy.org/archive/policy-paper-33.html> (last visited 05/06/2007).

Agre, Phillip (2002), Real time politics: the internet and the political process, *The Information Society*, 18 (5), 311-331.

Anderson, Patricia (1991), *The printed image and the transformation of popular culture, 1790-1860*, Oxford University Press, Oxford.

Anderson, Patricia (1992), 'Factory girl, apprentice and clerk' – readership of mass-market magazines, 1830-1860, *Victorian Periodicals Review*, 25, 67-72.

Arditi, Jorge (1999), Etiquette books, discourse and the deployment of an order of things, *Theory, Culture and Society*, 16 (4), 25-48.

Bailey, Richard, W. (1996), *Nineteenth-century English*, University of Michigan Press, Michigan.

Baldwin, Peter (2005), Mapping time: night and day in the nineteenth-century city, *Common Place*, 6 (1), <http://www.common-place.org/vol-06/no-01/baldwin/index.shtml> (last visited 05/06/2007).

Banfield, Marie (2007), From sentiment to sentimentality: a nineteenth century lexicographical search, *19: Interdisciplinary Studies in the Long Nineteenth Century*, 4, <http://www.19.bbk.ac.uk/MarieBanfieldPaper.pdf> (last visited 24/07/2007).

Barker, Hannah (2000), *Newspapers, politics, and English society, 1695-1855*, Longman, Harlow.

Bates, M.J. (2005), Information and knowledge: an evolutionary framework for information science, *Information Research*, 10 (4), paper 239.

Bawden, David; Robinson, Lyn (2000), *A distant mirror?: the internet and the printing press*, *Aslib Proceedings*, 52 (2), 51-57.

Bawden, David (2001), The shifting terminologies of information, *Aslib Proceedings*, 53 (3), 93-98.

Beard, Mary (1996), Review of Cambridge women: twelve portraits, *The London Review of Books*, Vol. 18 (17), September, 23-24.

Beaver, Patrick (1972), *A history of tunnels*, Peter Davies, London.

Beetham, Margaret (1990), Towards a theory of the periodical as a publishing genre, in Brake *et al* (Eds.) (1990), 19-32.

Belkin, N.J. (1978), Information concepts for information sciences, *Journal of Documentation*, 34 (1), 55-85.

- Belkin, N. J.** (1990), The cognitive viewpoint in information science, *Journal of Information Science*, 6 (91), 11-15.
- Beniger, James R.** (1986), *The control revolution: technological and economic origins of the information society*, Harvard University Press, London.
- Bennett, Scott** (1978), The bibliographic control of Victorian periodicals, in Don Vann *et al* (Eds.) (1978), 21-51.
- Bennett, Scott** (1982), Revolutions in thought: serial publication and the mass market for reading, in Shattock & Wolff (Eds.) (1982), 225-257.
- Bennett, Scott** (1984), The editorial character and readership of The Penny Magazine: an analysis, *Victorian Periodicals Review*, 17 (4), Winter, 127-141.
- Birkerts, Sven** (1996), *The Gutenberg elegies: the fate of reading in an electronic age*, Faber & Faber, London.
- Black, Alistair** (1995), New methodologies in library history: a manifesto for the 'new' library history, *Library History*, 11, 76-85.
- Black, Alistair** (1997), Lost worlds of culture: Victorian libraries, library history and prospects for a history of information, *Journal of Victorian Culture*, 2 (1), Spring, 124-141.
- Black, Alistair** (1998), Information and modernity: the history of information and the eclipse of library history, *Library History*, 14 (1), 39-45.
- Black, Alistair** (2001), The Victorian information society: surveillance, bureaucracy, and public librarianship in 19th-century Britain, *The Information Society*, 17, 63-80.

Black, Alistair (2004), Hidden worlds of the early knowledge economy: libraries in British companies before the middle of the 20th century, *Journal of Information Science*, 30 (5), 418-435.

Black, Alistair (2005), The library as a clinic: a Foucauldian interpretation of British public library attitudes to social and physical disease, ca. 1850-1950, *Libraries and Culture*, 40 (3), Summer, 416-434.

Black, Alistair (2006), Information history, in Cronin (2006) (Ed), 441-474.

Black, Alistair; Brunt, Rodney (1999), Information management in business, libraries and British military intelligence: towards a history of information management, *Journal of Documentation*, 55 (4), 361-374.

Black, Alistair; Muddiman, Dave; Plant, Helen (2007), *The early information society: information management in Britain before the computer*, Ashgate, Aldershot.

Black, Jeremy & Donald M. Macrauld (2003), *Nineteenth-century Britain*, Palgrave Macmillan, Basingstoke.

Bonavia, Michael (1987), *The Channel Tunnel story*, David & Charles Publishers Ltd, Newton Abbot.

Boonstra, Onno; Breure, Leen; Doorn, Peter (2004); Past, present and future of historical information science, *Historical Social Research/Historische Sozialforschung*, 29 (2), Netherlands Institute for Scientific Information, and the Royal Netherlands Academy of Arts and Sciences, Amsterdam.

Boyce, George; Curran, James; Wingate, Pauline (Eds.) (1978), *Newspaper history from the 17th century to the present day*, Constable, London.

Boyd-Barrett, Olivia (1978), Market control and wholesale news: the case of Reuters, in *Boyce et al* (Eds.) (1978), 192-204.

Brake, Laurel; Bell, Bill; Finkelstein, David (2000), *Nineteenth-century media and the construction of identities*, Palgrave, Basingstoke.

Braman, Sandra (1989), Defining information: an approach for policymakers, *Telecommunications Policy*, 13 (3), 233-242.

Braudel, Fernard (1981), *The structures of everyday life: civilization and capitalism, 15th to 18th centuries – the limits of the possible*, Vol. 1, translated from the French by Sian Reynolds, Collins, London.

Briggs, Asa (1985), *The collected essays of Asa Briggs; Volume I: words, numbers, places, people*, Harvester Press, Brighton.

Briggs, Asa (1993), *The age of improvement, 1783-1867*, Longman, London.

Brown, Lucy (1985), *Victorian news and newspapers*, Clarendon Press, Oxford.

Browne, Janet (2002), *Charles Darwin. The power of place*, Jonathan Cape, London.

BS 5408 (1976), *Glossary of documentation terms*. British Standards Institution.

Bud-Frierman, Lisa (Ed.) (1994), *Information acumen: the understanding and use of knowledge in modern business*, Routledge, London.

Buckland, M. (1991a), *Information and information systems*, Greenwood Press, New York

Buckland, M. (1991b), Information as a thing, *Journal for the American Society for Information Science*, 42 (5), pp. 351-360.

Burke, Peter (2001) *Eyewitnessing: the uses of images as historical evidence*, Cornell University Press, London.

Burke, Peter (2004), *A social history of knowledge: from Gutenberg to Diderot*, Polity Press, Cambridge.

Campbell, Kate (2000), Journalistic discourses and constructions of modern knowledge, in Brake *et al* (Eds.) (2000), 40-53.

Martin Campbell-Kelly (1994), The railway clearing house and Victorian data-processing, in Bud-Frierman (1994), 51-74.

Cantor, Geoffrey; Shuttleworth, Sally; Topham, Jonathan R. (2003), Representations of science in the nineteenth century periodical press, *Interdisciplinary Science Reviews*, 28 (3), 161-168.

Capurro, R. & Hjørland, B. (2003), The concept of information, *Annual Review of Information Science and Technology*, Vol.37, Chapter 8, 343-411.

Carr, E.H. (1961), *What is history?* Penguin, London.

Carre, Jacques (Ed.) (1994), *The crisis of courtesy: studies in the conduct-book in Britain, 1600-1900*, E.J. Brill, Netherlands.

Cartwright, Thomas (1900), *Domestic science. The science of domestic economy and hygiene treated experimentally. With numerous illustrations*, Thomas Nelson & Sons, London.

- Chew, Kenneth; Wilson, Anthony** (1993), *Victorian science and engineering portrayed in the Illustrated London News*, Science Museum, Alan Sutton Publishing, London.
- Coates, Tim** (Ed.) (2000), *Florence Nightingale and the Crimea 1849-55*, TSO Publishing, London.
- Cohen, Bernard** (1984), Florence Nightingale, *Scientific American*, 250 (3), 128-137.
- Cohen, Stanley** (1985), *Visions of social control: crime, punishment and classification*, Polity Press, Cambridge.
- Corrigan, H.S.W.** (1971), The Channel Tunnel in 1883, *History Today*, 21 (Nov), 803-809.
- Cranfield, G.A.** (1978), *The press and society: from Caxton to Northcliffe*, Longman Group, London.
- Cronin, Blaise** (2006) (Ed). *Annual review of information science and technology, volume 40*, Information Today, Inc, New Jersey.
- Curran, James** (1978), The press as an agent of social control: an historical perspective, in Boyce *et al* (Eds.) (1978), 51-75.
- Curtin, Michael** (1985), A question of manners: status and gender in etiquette and courtesy, *Journal of Modern History*, 57 (3), 395-423.
- Curtin, Michael** (1987), *Propriety and position: a study of Victorian manners*, Garland Publishing Inc, London.
- Dames, Nicholas** (2001), Brushes with fame: Thackeray and the work of celebrity *Nineteenth-Century Literature*, 56 (1), 23-51.

- Daunton, M. J.** (1989), 'Gentlemanly capitalism' and British industry 1820-1914, *Past & Present*, CXXII/No. 122 (February), 119-158.
- David, Saul** (1999), *Prince of pleasure: the Prince of Wales and the making of the regency*, Abacus, London.
- Davidoff, Leonore** (1973), *The best circles: society, etiquette and the season*, Croom Helm, London.
- Davidoff, Leonore** (1995), Rationalization of housework, Davidoff, (1995), 73-102.
- Davies, Godfrey** (1954), *Wellington and his army*, Blackwell, Oxford
- Day, Ronald, E.** (2001), *The modern invention of information. Discourse, history, and power*, Southern Illinois University Press, Carbondale and Edwardsville.
- Desmond, Adrian; Moore, James** (1994), *Darwin: the life of a tormented evolutionist*, W. W. Norton & Company, London.
- Diamond, Michael** (2003), *Victorian sensation; or, the spectacular, the shocking and the scandalous in nineteenth-century Britain*, Anthem Press, London.
- DiMaggio, Paul; Hargittai, Eszter; Neuman, W. Russell; Robinson, John P.** (2001), Social implications of the internet, *Annual Review of Sociology*, 27, 307-36.
- Dobraszczyk, Paul** (2005), Sewers, wood engraving and the sublime: picturing London's main drainage system in the Illustrated London News, 1859-62, *Victorian Periodicals Review*, 38 (4), Winter, 349-378.

Donajgrodzki, A.P. (Ed.) (1977), *Social control in 19th century Britain*, Croom Helm, London.

Don Vann, J.; Van Arsdel, Rosemary T. (Eds.) (1978), *Victorian periodicals – a guide to research*, The Modern Language Association of America, New York.

Dunn, P. M. (2002), Dr William Farr of Shropshire (1807–1883): obstetric mortality and training, *Archives of Disease in Childhood Fetal and Neonatal Edition*, 87 (1) 67-69.

Eastwood, David (1989), Amplifying the province of the legislature: the flow of information and the English state in the early nineteenth century, *Historical Research*, 62 (149), 276-294.

Eaton, J; Bawden, David (1991), What kind of resource is information? *International Journal of Information Management*, 1 (2), 156–165.

Eisenstein, Elizabeth (1979), *The printing press as an agent of change: communication and culture in early modern Europe*, Cambridge University Press, Cambridge.

Elias, Norbert (2000), *The civilizing process: sociogenetic and psychogenetic investigations*, translated by Edmund Jephcott, revised edition, Blackwell Publishers, Oxford.

Esbester, Mike (2005), “Those who ride may read”: guidebooks & railway travel in Britain, c.1830-c.1860, paper presented at the Annual Conference of the International Association for the History of Transport, Traffic and Mobility, York, October 2005.

Evans, Richard J. (2000), *In defence of history*, 2nd edition, Granta Books, London.

Fay, Sidney Bradshaw (1929), *The origins of the world war*, Macmillan, New York.

- Featherstone, Mike** (1990), Perspectives on consumer culture, *Sociology*, 24 (1), 1990, 5-22.
- Ferguson, N.** (2001), *The cash nexus: money and power in the modern world, 1700-2000*, Penguin, Harmondsworth.
- Fischer, Fritz** (1967), *Germany's aims in the first world war*, Chatto & Windus, London.
- Flichy, Patrice** (2004), The imaginary internet: how Utopian fantasy shaped the making of a new information infrastructure, *Business and Economic History*, 2, 1-11.
- Floud, R; Johnson, P.** (2004), *Cambridge economic history of modern Britain*, 3 vols, Cambridge University Press, Cambridge.
- Floud, R. & McCloskey, D.** (Eds.) (1994), *The economic history of Britain since 1700. Volume I: 1700-1860*, Cambridge University Press, Cambridge.
- Flugel, J.C.** (1930), *The psychology of clothes*, The Hogarth Press, London.
- Foulkes, Nick** (2003), *Scandalous society: passion and celebrity in the nineteenth century*, Abacus, London.
- Fox, Celina** (1977), The development of social reportage in English periodical illustration during the 1840s and early 1850s, *Past and Present*, 74 (February), 90-111.
- Frankel, Oz** (2006), *States of enquiry. Social investigations and print culture in nineteenth century Britain and the United States*, John Hopkins University Press, Baltimore.
- Gash, Norman** (1965), *Reaction and reconstruction in English politics, 1832-1852*, Oxford University Press, Oxford.

Gatrell, Vic (2006), *City of laughter: sex and satire in Eighteenth-century London*, Atlantic Books, London.

Gleig, George (1904), *Personal reminiscences of the Duke of Wellington*, William Blackwood & Sons, London.

Glendinning, Victoria (1969), *A suppressed cry: life and death of a Quaker daughter*, Routledge & Kegan Paul, London.

Gold, Steve (2000), *Certified time arrives on the internet*, in E-Commerce Times, 26th January, <http://www.ecommercetimes.com/story/2341.html> (last visited 05/06/2007).

Gourvish, Terry (2006), *The official history of Britain and the Channel Tunnel*, Routledge, London.

Gray, Valerie (2003), Charles Knight and the Society for the Diffusion of Useful Knowledge: a special relationship (1827-1846), *Publishing History: The Social, Economic and Literary History of the Book, Newspaper and Periodical Publishing*, 53, 23-74.

Grobstein, Paul (2005), *Revisiting science in culture: science as story telling and story revising*, in *Journal of Research Practise*, 1(1), article M1, <http://jrp.icaap.org/index.php/jrp/article/view/9/17> (last visited 05/06/2007).

Guedalla, Philip (1931), *The Duke*, Hodder & Stoughton, London.

Habermas, Jurgen (1962), *The structural transformation of the public sphere: an enquiry into a category of bourgeois society*. Translated by Thomas Burger (1989) Polity Press, Cambridge.

- Hall, Peter; Preston, Paschal** (1988) *The carrier wave: new information technologies and the Geography of Innovation, 1846–2003*, Unwin Hyman, London.
- Hamlin, Christopher** (2005), Games editors played or knowledge readers made?, *Isis, the History of Science Society*, 96, 633-642.
- Hampton, Mark** (1999), Journalists and the ‘professional ideal’ in Britain: the Institute of Journalists, 1884-1907, *Historical Research*, 72 (178), 183-201.
- Hayes, Emma & Morris, Anne** (2005), Leisure role of public libraries: a historical perspective, *Journal of Librarianship and Information Science*, 37 (2), 75-81.
- Haywood, Tim; Broady, Judith** (1994), Macroeconomic change: information and knowledge, *Journal of Information Science*, 20 (6), 377-388.
- Headrick, Daniel R.** (2000), *When information came of age: technologies of knowledge in the age of reason and revolution, 1700-1850*, Oxford University Press, Oxford.
- Henderson, W.O.** (1972), *Britain and industrial Europe, 1750–1870: studies in British influence on the industrial revolution in western Europe*, 3rd ed., Leicester University Press, Leicester.
- Hibbert, Christopher** (1975), *The London Illustrated News, social history of Victorian Britain*, Angus & Robertson, London.
- Hibbert, Christopher** (1999), *Wellington: a personal history*, Harper Collins, London.
- Higgs, Edward** (2004), *The information state in England: the central collection of information on citizens since 1500*, Palgrave Macmillan, Basingstoke.

Hobsbawm, E.J. (1969) *Industry and empire: an economic history of Britain since 1750*, Penguin, London.

Hobsbawm, E.J. (1975), *The age of capital, 1848-1875*, Weidenfeld and Nicolson, London.

Hoepper, Brian (2005), The history of words: 'spam', *The National Centre for the History of Education*,
<http://www.hyperhistory.org/index.php?option=displaypage&Itemid=722&op=page> (last visited 05/06/2007).

Holtham, Clive (2001), Valuation has its price, *Library Association Record*, 103 (4), 232-233.

Horn, Pamela (1995), *The rise and fall of the Victorian servant*, Gill and Macmillan Limited, Great Sutton.

Houghton, W. E. (1963), *The Victorian frame of mind, 1830-1870*, Yale University Press, London.

Hoyer, Svennik (2003), Newspapers without journalists, *Journalism Studies*, 4 (4), 451-463.

Hughes, Winifred (1992), Silver fork writers and readers: social contexts of a best seller, *Novel: a forum on fiction*, 25 (3), Spring, 328-347.

Hunt, Donald (1994), *The tunnel: the story of the Channel Tunnel, 1802-1994*, Images Publishing Ltd, Malvern.

Hutcheon, Linda (1988), *A poetics of Postmodernism: history, theory, fiction*, Routledge, London.

- Jeans, Herbert** (1928), *The man who told the world*, *Pearson's Magazine*, October.
- Jenkins, Keith** (1991), *Re-thinking history*, Routledge, London.
- Jupp, Peter** (1998), *British politics on the eve of reform: the Duke of Wellington's administration, 1828-1830*, Macmillan Press, Basingstoke.
- Karvalics, Laszlo** (1994), The claims, pre-history and programme of historical informatics, *Periodica Polytechnica Ser.Hum.and Soc.Sci.*, (1), 19-30,
http://www.ittk.hu/english/docs/historical_informatics_zkl.pdf (last visited 05/06/2007)
- Karvalics, Laszlo** (2003), *Internet: the real pre-history and its implications for social theory*, http://aoir.org/members/papers3/Maastrichtprehist_en.pdf (last visited 05/06/2007).
- Kaye, D.** (1995), The nature of information, *Library Review*, 44(8), 37-48.
- Leavis, Q. D.** (1939), *Fiction and the reading public*, Chatto & Windus, London.
- Lee, Heejin; Liebenau, Jonathan** (2000), Time and the internet and the turn of the millennium, *Time and Society*, 9 (1), 43-56.
- Leedham-Green, Elisabeth** (1996), *A concise history of the university of Cambridge*, Cambridge University Press, Cambridge.
- Leps, Marie-Christine** (1992), *Apprehending the criminal: the production of deviance in nineteenth century discourse*, Duke University Press, Durham.
- Lyon, D.** (2003), Technology vs. 'terrorism': circuits of city surveillance since September 11th, *International Journal of Urban and Regional Research*, 27 (3), 666-678.

Machlup, Fritz (1983), *Semantic quirks in studies of information*, in Machlup et al (Eds.) (1983), 641-671.

Magnello, Eileen (2001), *Florence Nightingale and medical statistics in Victorian England*, Wellcome Trust for the History of Medicine, University College London. Paper read at St. Thomas Hospital, London, 24th January.

Maidment, B. E. (2001), *Reading popular prints, 1790-1870*, 2nd edition Manchester University Press, Manchester.

Martin, Judith & Stent, Gunther S. (1990), I think; therefore I thank: a philosophy of etiquette, *American Scholar*, 59 (2), Spring, 237-254.

Marvin, Carolyn (1987), *Information and history*, in Slack et al (Eds.), 49-62.

Matheson, Donald (2000), The birth of discourse: changes in news language in British newspapers, 1880-1930, *Media, Culture and Society*, 22, 2000, 557-573.

Mattelart, Armand (2003), *The information society, an introduction*, translated from the French *Histoire de la Societe de l'information* by Susan G. Taponier and James A. Cohen, Sage Publications, London.

Matthews, Derek; Anderson, Malcolm; Edwards, John Richard (1997), The rise of the professional accountant in British management, *Economic History Review*, L (3), 407-429.

McKendry, Virginia (1994), The Illustrated London News and the invention of tradition, *Victorian Periodicals Review*, 27 (1) Spring, 1-24.

Meadow, C.T.; Yuan, W. (1997), Measuring the impact of information: defining the concepts, *Information Processing and Management*, 33 (6), 697-715.

Meadows, Jack (2004), *The Victorian scientist: the growth of a profession*, The British Library, London.

Meir, Natalie Kapetanios (2005), 'A fashionable dinner is arranged as follows': Victorian dining taxonomies, *Victorian Literature and Culture*, 33 (1), 133-148.

Moers, Ellen (1960), *The dandy: Brummell to Bebohm*, Viking, New York.

Montgomery Dossey, Barbara (2000), *Florence Nightingale. Mystic, visionary, healer*, Lippincott, Williams & Wilkins. Philadelphia.

Morgan, Marjorie (1994), *Manners, morals and class in England, 1774-1858*, Macmillan, Basingstoke.

Morus, Iwan Rhys (2000), 'The nervous system of Britain': space, time and the electric telegraph in the Victorian age, *The British Journal for the History of Science*, 33 (4) 119, 455-475.

Mugglestone, Lynda (2004), Departures and returns: writing the English dictionary in the Eighteenth and Nineteenth centuries, in O'Gorman *et al* (Eds.) (2004), 144-162.

Myers, Terry (Ed.) (2004), *Uncollected letters of Algernon Charles Swinburne*, 3 vols, Pickering & Chatto, London.

North, John S. (1978), The rationale – why read Victorian periodicals?, in Don Vann *et al* (Eds.) (1978), 3-20.

Ohmann, Richard (1996), *Selling culture; magazines, markets, and class at the turn of the century*, Verso, London and New York.

Oppenheim, Charles; Stenson, Joan & Wilson, Richard (2003), Studies on information as an asset III: views of information professionals, *Journal of Information Science*, 30 (2), 2004, 181-190.

Partridge, M. (1989), *Military planning for the defence of the United Kingdom, 1814-1870*, Greenwood, New York.

Pearson, Karl (1924), *The life, letters and labours of Francis Galton, Vol. II*, Cambridge University Press, Cambridge.

Percival, Janet (Ed.) (1978), *The Society for the Diffusion of Useful Knowledge, 1826-1848. A handlist of the Society's correspondence and papers*, The Library, University College London, London.

Perkin, Harold (1969), *The origins of modern English society, 1780-1880*, Routledge & Kegan Paul, London.

Picard, Liza (2005), *Victorian London: the life of a city, 1840-1870*, Weidenfeld & Nicolson, London.

Pick, Christopher (Ed.) (1992), *The laugh at the end of the tunnel: The channel tunnel through cartoonists' eyes. Maudit tunnel bien-amie: Le tunnel sous le manche vu par les dessinateurs humoristiques*, The Channel Tunnel Group Limited, Folkestone.

Pick, Daniel (1994), Pro-patria: blocking the tunnel, *Ecumene*, 1 (1), 77-93.

Pool, Ithiel de Sola (Ed.) (1977), *The social impact of the telephone*, MIT Press, London.

Pope, Norris (2001), Dickens's 'The signalman' and information problems in the railway age, *Technology and Culture*, July (42), 436-461.

Popper, Karl (1979), *Objective knowledge; an evolutionary approach*, revised edition, Oxford University Press, Oxford.

Porter, Roy (1988), Seeing the past, *Past and Present*, 118 (February), 186-205.

Postman, Neil (1999), *Building a bridge to the eighteenth century: how the past can improve our future*, Alfred A. Knopf, New York.

Price, R. (1999), *British society, 1680-1880: dynamism, containment and change*, Cambridge University Press, Cambridge.

Rauch, Alan (2001), *Useful knowledge: the Victorians, morality, and the march of intellect*, Duke University Press, London.

Read, Donald (1992), *The power of news: the history of Reuters, 1849-1989*, Oxford University Press, Oxford.

Richardson, Angelique (2003), *Love and eugenics in the late nineteenth century: rational reproduction and the new woman*, Oxford University Press, Oxford.

Robertson, Stephen (2004), Doing history in hypertext, *Journal of the Association for History and Computing*, 7 (2).

Robinson, Arthur H. (1967), The thematic maps of Charles Joseph Minard, *Imago Mundi*, 21, 95-108.

Rodrick, Anne Baltz (1996), 'Only a newspaper metaphor': crime reports, class conflict, and social criticism in two Victorian newspapers, *Victorian Periodicals Review*, 29 (1), Spring, 1-18.

Rogers, Richard (1995), Do you want to go for a ride on the chunnel? The British public understandings of the Channel Tunnel meet the Eurotunnel Exhibition Centre, *Public Understandings of Science*, (4), 363-396.

Rosenthal, Michael (2006), Public reputation and image control in late-Eighteenth-century Britain, *Visual Culture in Britain*, 7 (2), Winter, 69-92.

Rowley, Jennifer (1998a), Information policy pricing: factors and contexts, *Information Services and Use*, 18 (3), 165-175.

Rowley, Jennifer (1998b), What is information? *Information Services and Use*, 18 (4), 243-254.

Saracevic, Tefko (1999), Information science, *Journal of the American Society for Information Science*, 50 (12), 1051-1063.

Schement, Jorg; Lievrouw, Leah (1987a), *Competing visions, complex realities: social aspects of the information society*, Ablex Publishing Corporation, Norwood, New Jersey.

Schement, Jorge; Lievrouw, Leah (1987b), A third vision: capitalism and the industrial origins of the information society, in Schement *et al* (1987a), 33-45.

Schofield, Philip (1990), Bentham on public opinion and the press, in Kingsford-Smith, *et al* (Eds.) (1990), 95-108.

Shannon, Brent (2004), Refashioning men: fashion, masculinity, and the cultivation of the male consumer in Britain, 1860-1914, *Victorian Studies*, 46 (4), 597-630.

Shannon, Claude (1948), A mathematical theory of communication, *Bell System Technical Journal*, 27 (July, October), 379-423, 623-656.

Shannon, Claude & Weaver, W. (1949), *The mathematical theory of communication*, University of Illinois Press, Urbana.

Shils & Blacer (Eds.) (1996), *Cambridge women: twelve portraits*, Cambridge University Press, Cambridge.

Simmel, Georg (1964), On the significance of numbers for social life, in *The sociology of Georg Simmel*, translated by Kurt Wolff (1964), Macmillan Ltd, London, 87-104. Originally from *Soziologie, Untersuchungen uber die Formen der Vergesellschaftung*, (1908).

Sinnema, Peter W. (1998), *Dynamics of the pictured page: representing the nation in the Illustrated London News*, Ashgate, Publishing, Vermont.

Slack, Jennifer; Fejes, Fred (Eds.) (1987), *The ideology of the information age*, Ablex Publishing, New Jersey.

Slater, Humphrey; Barnett, Corelli (1958), *The Channel Tunnel*, Alan Wingate, London.

Small, Hugh (1998a), *Florence Nightingale's statistical diagrams*, a paper from the *Stats & Lamps Research Conference*, organised by the Florence Nightingale Museum Trust at St. Thomas' Hospital, 18th March,

<http://www.florence-nightingale.co.uk/small.htm>. (last viewed 05/06/2007).

Small, Hugh (1998b), *Florence Nightingale; avenging angel*, Constable, London.

- Smelser, Neil J.** (1991), *Social paralysis and social change. British Working-Class Education in the Nineteenth Century*, Centennial, California.
- Smith, Anthony** (1978), *The politics of information: problems of policy in modern media*, Macmillan Press Ltd, London.
- Smith, Anthony** (1980), *The geopolitics of information: how western culture dominates the world*, Faber & Faber, London.
- Sommerville, C. John** (1996), *The news revolution in England: cultural dynamics of daily information*, Oxford University Press, Oxford.
- Spink, A. & Currier, J.** (2006), Towards an evolutionary perspective for human information behaviour. An exploratory study, *Journal of Documentation*, 62(2), 171-193.
- Standage, Tom** (1998), *The Victorian internet*, Walker Publishing, New York.
- Stephens, W.** (1998), *Education in Britain, 1750-1914*, St. Martin's Press, New York.
- Stevenson, John** (1977), Social control and the prevention of riots in England, 1789-1829, in Donajrodzki (Ed.) (1977), chapter 1.
- Stigler, George J.** (1961), The economics of information, *Journal of Political Economy*, 69 (3), 213-225.
- Storey, Graham** (1969), *Reuters: the story of a century of news gathering*, Greenwood Press, New York.
- Sutherland, Gillian** (2006), *Faith, duty, and the power of mind: The Cloughs and their circle 1820-1960*, Cambridge University Press, Cambridge.

Talja, S.; Tuominen, K.; Savolinen, R. (2006), 'Isms' in information science: constructivism, collectivism, and constructionism, *Journal of Documentation*, 61 (1), 79-101.

Taylor, A.J.P (1945), *The course of German history: a survey of the development of Germany since 1815*, Hamish Hamilton, London.

Taylor, James (2005), Commercial fraud and public men in Victorian Britain, *Historical Research*, 78 (200), May, 230-252.

Terpening, William R. (1996), Satire and science in the first 'information age', *The Victorian Web*, <http://www.victorianweb.org/authors/dickens/pickwick/wrt1.html> (last viewed 05/06/2007).

The internet in a cup (2003), *The Economist*, December 20th – January 2nd, 48-50.

Travis, Anthony, S. (1967), *Channel tunnel, 1802-1967*, Signal Transport Papers No. 2, Peter Davis, Essex.

Travis, Anthony S. (1991), Engineering and politics: the Channel Tunnel in the 1880s, *Technology and Culture*, 32 (3), July, 461-497.

Tufte, Edward R. (1983), *The visual display of quantitative information*, Graphics Press, Connecticut.

Wagner, Tamara (2002), The silver-fork novel, *The Victorian Web*, <http://www.victorianweb.org/genre/silverfork.html> (last visited 05/06/2007).

Warner, Julian (2000), What should we understand by information technology (and some hints at other issues)? *Aslib Proceedings*, 52 (9), 350-370.

Webster, Frank (2005), *Theories of the information society*, 2nd edition, Routledge, Oxford.

Weller, Toni (2005), A new approach: the arrival of informational history, *Proceedings of the XVI international conference of the Association for History and Computing, 14-17 September*, Royal Netherlands Academy of Arts and Sciences, 273-278.

Weller, Toni (2006), A continuation of Paul Grobstein's theory of science as story telling and story revising: a discussion of its relevance to history, *Journal of Research Practise*, 2 (1) article M3, <http://jrp.icaap.org/content/v2.1/weller.html> (last visited 05/06/2007).

Weller, Toni (2007), Information history: its importance, relevance, and future, *Aslib Proceedings*, 59 (4/5), 437-448.

Weller, Toni; Bawden, David (2005), The social and technological origins of the information society: an analysis of the crisis of control in England, 1830-1900, *Journal of Documentation*, 61 (6), 777-802.

Weller, Toni; Bawden, David (2006), Individual perceptions: a new chapter on Victorian information history, *Library History*, 22 (2), July, 137-156.

Weller Toni; Haider, Jutta (2007), Where do we go from here? An opinion on the future of LIS as an academic discipline, *Aslib Proceedings*, 59 (4/5), 475-482.

White, Hayden (1987), *Metahistory: the historical imagination in nineteenth-century Europe*, Baltimore.

Whiteside, Thomas (1962), *The tunnel under the channel*, Rupert Hart-Davis, London.

- Williams, Rosalind** (2000), 'All that is solid melts into air'. Historians of technology in the information revolution, *Technology and Culture*, October (41), 641-668.
- Wilson, Keith** (1994), *Channel Tunnel visions, 1850-1945: Dreams and Nightmares*, The Hambledon Press, London.
- Wilson, A. N.** (2003), *The Victorians*, Arrow Books, London.
- Winston, Brian** (1998), *Media, technology and society. A history: from the telegraph to the internet*, Routledge, London.
- Wittgenstein, Ludwig** (1985), *Philosophical investigations*, Blackwell, Oxford.
- Wouters, Cas** (1995), Etiquette books and emotion management in the 20th century: part one – the integration of social classes, *Journal of Social History*, Fall, 29 (1), 107-124.
- Yates, JoAnn** (1994), Evolving information use in firms, 1850-1920: ideology and information techniques and technologies, in Bud-Frierman (Ed.) (1994), 26-50.
- Yates-Mercer, P.; Bawden, David** (2002), Managing the paradox: the valuation of knowledge and knowledge management, *Journal of Information Science*, 28 (1), 19-29.
- Zins, C.** (2006), Redefining information science: from 'information science' to 'knowledge science,' *Journal of Documentation*, 62 (4), 447-461.

10. Appendices

10.1 Appendix One (see p. 133)

Publishers Cited in Abstracted Items in *The Penny Magazine*, Saturday, May 14th, 1842 to Saturday, May 13th, 1843.

There were 65 individual abstracted items in total. Of these, 41 (63.1%) do not have a known publisher; only 24 (36.9%) could be identified.

Publishers	Times Cited	% Of Authors Identified
CK/SDUK	5	20.8
John Murray	5	20.8
Longman, Brown, Green & Longman	4	16.7
Blackwood	2	8.3
Smith, Elder & Co	2	8.3
Harding, Triphook & Lepard	1	4.2
Jackson & Walford	1	4.2
John Parker	2	8.3
William Curry	1	4.2
William H. Allen	1	4.2
Total Identified Authors	24	100
Unknown	41	-
Total	65	-