

Contradictory Stereotypical Depictions of
Japan's Relationship with Technology in
the British Press

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A Thesis Submitted in Fulfilment of the
Requirements for the Degree of Doctor of
Philosophy

School of Modern Languages
Cardiff University

Submitted: June 2018

Revised and Resubmitted: December 2018

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Acknowledgements

This PhD research and the resultant thesis would not have been possible without the support of the various funding bodies that generously provided financial assistance at every stage of the project. The first three years of this degree (2014-2017) was funded by a postgraduate studentship from the Great Britain Sasakawa Foundation (GBSF), whose involvement has not only provided the financial means by which I could support myself whilst carrying out my research, but has also given me opportunities to disseminate my research and involve myself within the academic community. I would also like to thank the British Association for Japanese Studies (BAJS) for awarding me the John Crump Studentship to aid with living costs during my writing-up year (2017-2018).

The two fieldtrips necessary for obtaining crucial data were supported with funds from the Japan Foundation Endowment Committee (JFEC), which fully covered a one-month period of fieldwork in Tokyo in October 2015, and the Sir Philip Reckitt Educational Trust (SPRET), which assisted with travel costs for the second fieldtrip in October 2016.

This thesis would not exist without the contributions of a great many people: contacts who helped put me in touch with prospective interviews, those interviewees who provided invaluable information on the use of fax machines and robots in Japan, friends and contacts in Tokyo and throughout Japan. While interview data has been anonymised, I would like to thank all companies and representatives who consented to interview, for giving up their time to answer my questions, for their hospitality, and for going the extra mile, in some cases sending me additional information after the interview.

I would like to thank those journalists at the Foreign Correspondents Club of Japan (FCCJ), for introducing me to other journalists, answering my questions, and offering additional help where they could.

The last four years would not have been possible without the support of my family, my friends—not least those at 772—and my peers in the School of Modern Languages. Lastly, I would like to thank my supervisors, Dr Christopher Hood and Professor Gordon Cumming, who have guided me through this entire process, offering their combined expertise and encouragement.

Abstract

Fake news has become a global buzzword, grabbing headlines and sparking debate about how to identify fabricated stories. However, inaccuracy can arise in other ways. A key example of this is stereotyping in the media, which affects not only minority groups, but entire nations. Japan is a country often defined in the British media through stereotypical depictions, falling back on Orientalised, unchanging notions of 'Japaneseness' and its perceived difference to the West. The reporting of Japan's use of technology in the British press, however, presents a puzzle: in some instances, Japan is depicted as being low-tech, whilst in others, Japan is high-tech. These are not contrasts, but direct contradictions. How can they coexist?

Extant research has blamed journalists as lazy, lacking knowledge about Japan or for 'Japan-bashing', but has done so without taking the time to interview journalists. No previous research has explained the coexistence of contradictory stereotypical depictions, nor considered why journalists employ stereotypical depictions in articles. The thesis goes beyond demonstrating misrepresentation, and considers how these contradictory depictions can coexist, whether they can be evidenced, and why they persist.

Taking articles about fax machines as an example of low-tech Japan and articles about robots for high-tech Japan, the thesis combines critical discourse analysis and fieldwork to test depictions against empirical evidence. It reveals that these technologies are not used to the extent depicted in the British media, and that the context for their use is omitted. It also shows that these depictions are not as contradictory as it first appears, as they derive from the same stereotypical knowledge. Furthermore, these depictions are not the result of lazy journalism, but complex systemic factors within foreign news reporting. These findings are not only significant for the reporting of Japan, but for understanding the media depictions of many other countries, too.

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Notes on Style

Japanese names have been written with the given name followed by the family name in order to avoid confusion for those more familiar with European naming conventions. Japanese words have been rendered in the Latin alphabet using Hepburn romanisation, with extended vowels represented by macrons with the exception of *i* (*ā, ē, ō, ū*). Furthermore, Japanese words are given in italics. Following the anglicisation, the original Japanese (in *hiragana, katakana* or *kanji*) is given in parentheses. In the case of Japanese words which are not uncommon in the English language, such as place names, e.g. Tokyo, or other Japanese words, e.g. manga or sushi, these are written without italicisation, nor with macrons. One further exception to these conventions is the spelling of Henn-na Hotel, a hotel featured as part of this study's fieldwork. Under Hepburn romanisation, this would be written as 'hen na', but Henn-na Hotel is the hotel's official English language name and so this spelling will be used throughout.

Quotations in English from Japanese sources, such as interviews, are the author's own translation, unless otherwise stated. Price conversions from Japanese Yen (JPY) into Pound Sterling (GBP) have been done so using an approximated exchange rate of £1 GBP to ¥150 JPY, based on an average between January and May 2018.

The Harvard referencing system has been used, which uses in-text citations, given in parentheses following the format: (Surname Year, Page(s)). The use of 'f' following a page number denotes 'and the following page', whilst 'ff' after a page number means from that page until the end of the document. Footnotes have been used to provide supplementary information where deemed appropriate.

British English has been used throughout, preferring *~ise* over *~ize*, with the exception of quotation, where spellings have been left unaltered.

When referring to the writer of this thesis, the term 'author' is used in the third person.

Chapter 1: Introduction

The term 'fake news' has become something of a global sensation, seeing so much use in 2017 that it was made 'word of the year' by dictionary publisher Collins. The dictionary defines the term as 'false, often sensational, information disseminated under the guise of news reporting' (Collins 2017). Distinguishing between 'real' and 'fake' news has become a highly important topic, with international education experts recommending that children be taught how to think critically about what they are reading (Kershaw 2017). In 2017, US marketing firm Edelman carried out a poll of 1,000 Americans on the impact of fake news on trust in the media, finding that fake news has led to a marked decrease in trust of news media organisations (Edelman 2017). While fake news has dominated the headlines, the question of media accuracy is not new, having been a matter of concern since at least the end of the nineteenth century (Oppen 1894). Indeed, while fake news is the intentional misreporting or propagation of false information (Allcott & Gentzkow 2017), inaccuracy can also arise unintentionally. To explain this inaccuracy, Fowler (1991) argues that news is not facts, but rather the presentation of the journalist's own ideas and beliefs. This results from four processes: bias; 'news values', which refers to the newsworthiness of events; social and economic factors of news selection; and stereotyping, which is the mental categorisation which determines newsworthiness (1991, pp. 10-17).

Let us focus on this last point: what exactly is stereotyping? Cardwell (1996) provides a brief but useful summary of the term stereotype as a 'fixed, over generalized belief about a particular group or class of people'. Even more useful from the perspective of this study is McGarty's use of the term 'stereotypical depiction' to refer to the specific instantiation of this belief (2002). A great number of studies of stereotypical depictions in the press and the media have been carried out, but these have tended to focus on the stereotyping of minority groups and specific professions. These include studies on the media stereotyping of black males (The Opportunity Agenda 2011), nurses (Bridges 1990), the elderly (Vasil & Wass 2006), those with mental illness (Wahl 1992) and Muslims (Semaan 2014), to name but a few. This thesis concerns itself with the stereotyping of nations, or more specifically the stereotypical depictions of their peoples and culture. Such stereotypical depictions arguably concern more people, as the stereotype can apply to millions, if not hundreds of

millions of people. As Lindsay (1997, 133) argues, they are important due to their potential for impact on the global stage, such as in territorial politics.

In order to study national stereotypical depictions in the press, it is first necessary to select a country's press, and a country that has been subject to such stereotypical depiction as a case for analysis. For this thesis British newspapers and news websites have been selected, due to the diversity of publication types available, from traditional broadsheet newspapers, to low-cost tabloid newspapers, as well as online-only publications (these types will be expanded upon and described in the methodology chapter, Chapter 3). Indeed, the UK has 13 national newspapers, compared to 9 in France, 9 in Germany, and 5 in the United States (Newsworks 2018).

Moreover, through the Internet, British news is consumed on a global scale, and thus has the potential to affect and influence the opinions of readers across the world.¹ In this study of national stereotypical depictions it is necessary to study a country that is perceived by the British as being different from the UK—in terms of its history, culture and geographic location—since stereotyping is primarily the categorisation of the Other (Fürsich 2010, 113). As to the selection of a case study country, there are of course a large number to choose from: the USA, for example, is a geographically distant country, but as a fellow Anglophone country, with a shared history and whose culture is well-known in the UK through popular culture imports, it is perhaps not the most ideal case for study. Japan, on the other hand, offers a clearer case of a country that is demonstrably perceived by its difference. Despite the comparative affordability of air travel these days, Japan remains an atypical travel destination for Britons (ONT 2016; JNTO 2016). As such, knowledge about Japan for most of the British public is generally limited to that which they receive indirectly.

Previous studies of the representation of Japan in the British media have shown that the country is often characterised using stereotypical depictions, such as the loyal and disciplined employee, or historical characterisations, such as the ruthless warrior or honourable samurai (Hammond 1997; Hargreaves et al. 2001; Morris 2011). Hargreaves, Inthorn & Speers found that articles exhibited a 'tendency to see Japan as strikingly different in cultural terms from the west' (2001, 19), indicating a process of Othering. The study identified technology stories as a major theme for

¹ A study by Thurman (2007) found that some British sources, including *BBC News* and the website of *The Guardian*, were achieving higher readership in the US than American publications like *USA Today*, *The Los Angeles Times* and *The Chicago Tribune*, amongst others.

Japan-related articles, and their analysis determined that Japan is perceived as a 'nation eccentrically passionate about gadgets' (2001, 24).

Since technology is in constant development, even if the characterisation of Japan as obsessed with 'gadgets' is still present in the news, the actual technology being reported will have changed since this 2001 study. As an example of technology-related reporting of Japan since that study, let us take the accounts of one of the most significant events to occur in the country in recent years, attracting global media attention: the Tohoku Earthquake of 11th March 2011, the resultant tsunami, and the nuclear meltdown at the Fukushima Daiichi Nuclear Power Plant in Fukushima Prefecture (Lipsy et al. 2013, pp. 6082f). The meltdown in particular led to a worldwide debate on the use of nuclear power as an energy source (McGrath 2011), and subsequent studies show that some countries decided to phase out the technology altogether as a consequence (Kim et al. 2013; Rogner 2013). In addition to this debate, what was interesting about the reporting of the event was how Japan's perceived level of technology was depicted in articles: the attitude in some British newspapers (e.g. *The Telegraph* 2011) was that given the reputation of Japan as a world leader in technology, one of Japan's many robots would be able to deal with the problem. However, none of Japan's robots were fit for this purpose, necessitating international assistance.

A preliminary search of British news articles about technology in Japan using the LexisNexis database found that this was not the first time that expectations of Japan's level of technology had been subverted.² A 2010 *BBC News* article talked about Japan's 'low-tech belly' in contrast to its high-tech image (Fitzpatrick 2010). Moreover, since 2012, there have been multiple articles in British news publications about Japan's use of fax machines, which are portrayed as an outdated technology (Oi 2012). At the same time, however, the preliminary analysis showed that articles

² The LexisNexis website hosts a newspaper database contains digitised versions of articles from newspapers in a number of languages from many different countries, and allows the user to search for specific terms, within specific date ranges, and to select different sections of the newspaper (business, sport, opinion, etc.). For a preliminary search, the UK National Newspapers collection was searched, which is a grouping of national UK newspapers and their respective websites. While not all of these publications would be used in the news article sampling for the case study, they nonetheless provided a useful starting point. In a keyword search of this collection, between 1 January 2000 and 31 December 2015, 333 articles with 'Japan' in their headlines also contained the keyword 'high-tech'. While many articles wrote of Japan as genuinely high-tech, even in the year 2000, Japan's status as the global leader in technology was being questioned, with one article in *The Times*' headline proclaiming 'Japan's importance has faded' (Searjeant 2000). That these few articles are so at odds with the typical discourse in the British media made the topic worth pursuing. Although there are only a few exceptions, further analysis of the results found that 18 of these articles referenced 'tradition', while 57 referenced 'culture' or derived terms, indicating that even if Japan is not being depicted as low-tech, the articles may appeal to aspects of 'traditional' Japan.

continue to depict Japan as high-tech. This presents something of a puzzle: how is it that two depictions of Japan, one of a technologically advanced, robot-loving country and the other a backward, fax-using nation, that are seemingly at odds with each other, coexist? In order to solve this puzzle, this research project was developed, focussed around the following research question:

To what extent are contradictory depictions of technology in Japan in the British press rooted in stereotyping, and how can they coexist?

Aims & Methods

This overarching research question cannot be answered directly, due to its complexity, and so three subsidiary questions were devised in order to address different aspects of the research question:

- 1) To what extent are stereotypical depictions present in news articles about technology in Japan?
- 2) Are contradictory stereotypical depictions products of different stereotypical knowledge?
- 3) Are contradictory stereotypical depictions supported by evidence?

To achieve the aims of this thesis, it will be necessary to look at examples of the two different depictions of Japan: the first of Japan as low-tech, and the second of Japan as high-tech. For this reason, the study adopts a case study-based approach, with two technologies, each addressing one of these depictions. While the methodology chapter (Chapter 3) will describe the advantages in greater detail, as well as the exact methods, it is worth noting here that case study research has the distinct benefit of being inherently multimodal, requiring the analysis of different kinds of evidence (Gillham 2005, pp. 1f). This is particularly appropriate given the three working questions above, which will address not only the text content of news articles, but also look at their production, necessitating interviews, observation and other kinds of methods. Since technology is a broad category, and it would be impractical to look at every single article on technology in Japan, as noted earlier this thesis will pick particular technologies as examples of these differing depictions. The preliminary search of British news articles about technology in Japan has already revealed two such technologies: fax, which represents low-tech Japan, and robots, representing high-tech Japan. While the study necessarily builds upon extant literature and studies, it distinguishes itself in a number of ways, which will be discussed in the next section.

Originality & Significance

This thesis differentiates itself from previous research on Orientalism and stereotyping. It is original in at least two respects. It is the first study to examine the coexistence of old and new technologies, and their stereotypical depictions in the British press. Moreover, it is the first to deploy field research to test empirically stereotypical depictions of Japan's relationship with technology in the British press.

This research is also significant on three grounds. First, it crosses disciplinary boundaries, drawing on the fields of journalism studies, discourse studies, cultural studies and Japanese studies to formulate a highly interdisciplinary study. In addressing big concepts such as Orientalism, stereotyping and representation, a more comprehensive perspective can be drawn from the insights of different disciplines than appealing to a single discipline (Newell & Klein 1997, 395). Secondly, it is a multimodal study, utilising three main methods: document review in the form of critical discourse analysis, observation, and interview. As such, this study is replicable, and provides a streamlined analytical framework for critical discourse analysis that can be employed in future research. Lastly, by virtue of its interdisciplinary and multimodal approach, this study is empirically rich, and challenges existing approaches. Typical studies of stereotyping in the press, which are limited to the identification of stereotyping in articles through pure analysis of text and imagery (Seiter 1986, 19), but his thesis is not concerned with documenting the presence of stereotyping alone. Rather, it will augment analysis of newspaper articles with observation-based fieldwork and interviews in order to ascertain where exaggeration begins and ends in depictions of Japan. Consequently, this study makes use of a diverse range of evidence, which results in a more comprehensive and balanced piece of research.

A fresh analytical method for considering stereotypical depictions in the press is particularly needed at a time when 'fake news' is in the public consciousness. In what has been dubbed the 'post-truth' era, researchers are looking to find ways to use technology to identify and counter misinformation (Lewandowsky et al. 2017), but it is also necessary for the individual to scrutinise information that they are presented with and develop the necessary critical skills to weed out fake news. While start-ups, cyber security firms and social media giant Facebook are all developing algorithms to detect fake news (Snow 2017), it is not so simple to detect stereotypical depictions,

which are bound up in attitudes, assumptions, and wider discursive practices. While Japan has been taken as a case, this research is not only of interest to those within Japanese studies, as stereotyping affects the representation of all groups. This thesis is thus relevant, but not limited, to those in journalism in media studies, sociology, cultural studies and science and technology studies, as an example of how technology can be used as an artefact through which other cultures are perceived.

The methodological approach adopted for this study, which will be described in brief below and expanded in Chapter 3, is thus highly important at a time when the accuracy of news is in question. By moving beyond pure textual analysis, common in existing studies, and bringing in empirical data which can serve as a point of comparison, it is possible to carry out a more rigorous assessment of the representativeness of foreign news reporting. Moreover, this thesis will give a voice to the journalists and editors responsible for news articles, in order to bring a more balanced and nuanced analysis of foreign news reporting. As the literature review will show, research on inaccurate reporting of foreign countries usually criticises journalists, but does not look at journalism as an industry, which is driven by a paying audience and a need to generate income.

Key Concepts

Throughout this thesis certain terms and concepts will be core to the argument and thus be repeated throughout. Several of these words have been used already in this introduction, and although some of these words are used in everyday language, such as stereotyping, discourse and robot, within academia their precise meaning varies from author to author, and between disciplines. Some of the terms employed throughout the study are interrelated, as illustrated by Figure 1.1 below:

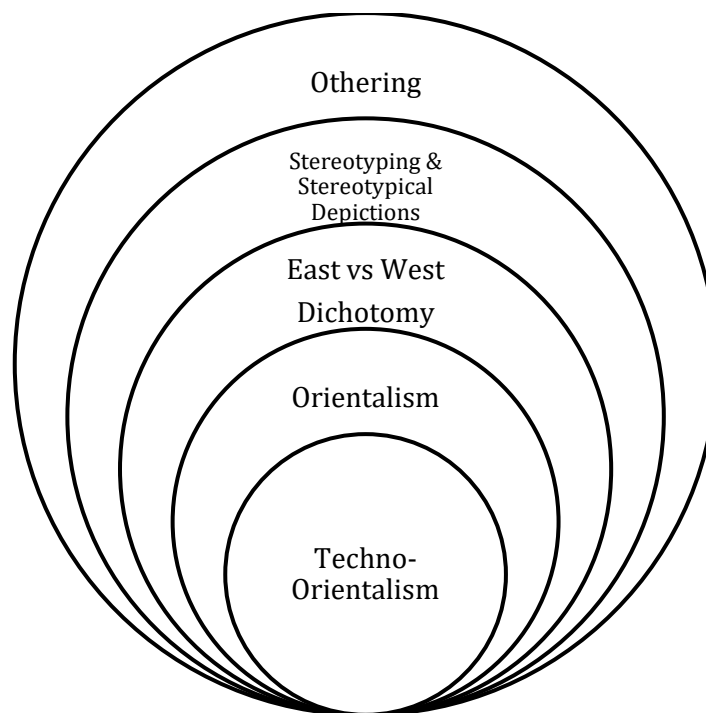


Figure 1.1 The Interrelatedness of Key Concepts

Othering: According to Gray (2009), Othering is a typical practice of the media for representing and making sense of cultural difference. Pickering calls the Other a ‘denial of history’ (Pickering 2001, 48) and an obstacle to change. He associates this with the Barthesian idea of the ‘myth’ in which cultural signs are represented as ‘essential types’, which cannot change (2001, 48). For Pickering, the ‘Other’ is a component of ‘myth’, and it is through myths that stereotypes operate (2001, pp. 48f). He argues that looking at ‘stereotypicality through the conceptual lens of the Other’ enables one to see the arrested and ahistorical nature of these representations (2001, 69).

Stereotyping & Stereotypical Depictions: Stereotyping is ‘the *use* of stereotypic knowledge in forming an impression’ (Brewer 1996, p254), which results in a stereotype, defined as ‘a fixed, over generalized belief[s] about a particular group or class of people’ (Cardwell 1996). Stereotypical depictions, which are the focus of this thesis, are the specific instantiations of the stereotype (McGarty 2002, pp. 18f). McGarty gives the example of the statement ‘Librarians are bookish and quiet’ which is the activation of stereotypical knowledge about librarians (‘knowledge’ such as librarians having a particular look, librarians loving books, and so on) and the larger librarian stereotype in a particular utterance (2002, 18).

East vs West Dichotomy: The splitting of the world between East and West creates a dichotomy which positions the two as opposites, with the West as the rational and

modern, and the East as the irrational and traditional (Chahuan 2005, 48). At times it has been defined by geography, culture or divided by the type of tools used by our Palaeolithic ancestors (Kawada 2003, 95). At times it has been political, too, as during the Cold War, the Eastern Bloc was considered the 'East' (Bakić-Hayden 1995). In this study, Said's division of East (or Orient) and West (or Occident) will be used as a point of reference: according to Said the West is used to mean the Americas, Europe, and Australia, while the East refers to countries in the Middle East, Central Asia, East Asia and South Asia (1978, pp. 1-28). These constructs are employed in this study not to legitimise them, but for the purposes of exposing and analysing Orientalist discourses within news articles, which are guilty of this distinction.

Orientalism: Orientalism is the specific Othering of the East. Said (1978, 3) put it briefly as this: 'Orientalism as a Western style for dominating, restructuring, and having authority over the Orient'. Orientalism is thus a form of dominance over the East by the West, portraying the East as inferior through exaggerated and inaccurate depictions. The Orientalised view of the East is constructed through specific stereotypical depictions, found in television, film and all media (1978, 26).

Techno-Orientalism: This is an off-shoot of Orientalism which has been developed specifically for the case of Japan, which some scholars have argued does not fit in with Said's theory (Steenstrup 1986). The Techno-Orientalist image of Japan is a Japan that is technologically superior to the West, but is nonetheless inferior in moral terms, thus reaffirming the West as dominant and superior (Morley & Robins 1995).

Discourse: Discourse is a word that will be used frequently in this project as it is the main object of analysis in the critical readings of newspaper articles that will be carried out in the study. Jørgensen & Phillips (2002) address the fact that 'discourse' is a particularly vague term and has been defined differently by different discourse analysts.³ They propose the following definition for talking about discourse: 'a particular way of talking about and understanding the world (or an aspect of the world)' (2002, 1). Discourse is thus the way in which something is talked about, i.e. the kind of language used, the assumptions made, and the social context in which it is discussed.

³ For a review of different forms of discourse analysis, as well as the varying definitions of 'discourse', see Diaz-Bone, Bührmann, Gutiérrez Rodríguez, Schneider, Kendall and Tirado (2007), which charts the development of the notion of discourse and the formation of discourse analysis since Foucault.

Fax: The word fax is an abbreviated form of the term ‘facsimile’, meaning an exact copy, a term employed in the printing industry to refer to reproductions of books and other printed material. Fax or facsimile here refers to the technology first developed by Alexander Bain in 1842 (Peterson 1995, 470) and went on to become a highly important communication technology until it began to be replaced by email (Coopersmith 2015, 183). In this thesis, the term fax will be used to refer to fax machines, i.e. the specific hardware, rather than the underlying technology. References to ‘fax’ are thus a shorthand for fax machine, the standalone device that enables the copying and sending of a document over a phone line or Internet connection.

Robot: A definition of ‘robot’ has been included here because the term itself is open to a high degree of interpretation. The word itself comes from the Czech *robota*, which can be loosely translated as ‘hard work’ or ‘slave labour’, and was first introduced in Karel Čapek’s play *Rossum’s Universal Robots* in 1920, which centred around human-like worker robots, which eventually rebel against their human overlords (Logsdon 2000, 18). Logsdon highlights the issue of defining robot in the modern era as it can include ‘nonrobot’ items such as ‘bottle-capping machines’ (2000, 19) as well as mechanical men. Since the word can refer to many different kinds of machine, this thesis focusses only on anthropomorphised robots, as this is type, with suggestions of artificial intelligence represents the pinnacle of futuristic robots. Commonly, anthropomorphised robots are humanoid, and can be seen in Čapek’s play. A humanoid robot is quite simply a robot that resembles a human in form, i.e. it has two arms, two legs, a head and is roughly human in shape, though some researchers such as Bekey have argued that the term should also reflect the function of the robot too, meaning that a humanoid should carry out ‘human’ jobs (2008, 71). This thesis adopts this understanding and so will only look at robots occupying a customer-facing role, as typically occupied by humans. In addition, the thesis includes animoid robots, too, which are robots designed to resemble animals. While such robots have often been developed as robot pets (which are not being considered in this study), others, like humanoid robots, have been created to assist with the delivery of services, particularly elderly care, such as Paro, a robot seal (Griffiths 2014), and ROBEAR, a robot bear (RIKEN 2015).

Culture: Lastly, one term that will frequently appear in this thesis is ‘culture’, but no definition will be given. To talk of culture can result in a mire of definitional confusion, abstraction and ambiguity. While the term is often used in everyday speech, as Helen

Spencer-Oatey notes it is a 'notoriously difficult term to define' (2012, 1), and its definition varies depending on its context. Indeed, Kroeber and Kluckhohn (1952) found 164 different definitions of culture in a 1952 critical review of concepts and definitions of 'culture', and since then more definitions and interpretations have been proposed. For Geert Hofstede, there are two ways of understanding culture: it can refer to education and the arts—literature, fine art and so on, or it is another way of referring to civilisation or refinement of the mind (2003, 9). Meanwhile, for James W. Carey, culture is communication: the transmission of knowledge, ideas, and beliefs (1989). Defining 'culture' depends on if one is talking about organisations, national cultures, subcultures, or other, more highly-specific 'cultures'. The attempt to define culture has been the work of many research papers and monographs, and 'cultural studies' is a field in of itself. Anthropologists and cultural anthropologists use the term to refer to 'specific historical and geographical traditions' of man (Wagner 1981, 1). As Christopher Hood (2007, 6) says, culture 'appears to be something that exists, but it is also difficult to be certain that what we think it to be, is in fact the case'. Indeed, it cannot be denied that culture exists, and it is important, too, influencing our values, and our belonging to social groups (Spencer-Oatey 2012, pp. 3-15), but it is a broad concept that is used loosely. Throughout this thesis it will be shown that British news articles have repeatedly appealed to notions of 'Japanese culture' as an explanation for the use or non-use of technology in Japan. It is not the intention of this thesis to second-guess what a British journalist or editor may understand by 'culture' or 'Japanese culture', but by highlighting the difficulty of these terms, the aim is to emphasise the inadequacies of this kind of explanation in the press.

Thesis Structure

Below, the structure of the study has been outlined, chapter-by-chapter. Each chapter will work towards solving the puzzle inherent to the research question, first by surveying relevant literature, then by formulating the methodological approach for the study, and subsequently by analysing news articles which depict Japan as either low-tech or high-tech.

Chapter 2: The literature review surveys the current literature relevant to this study. Since this thesis crosses over several disciplines, the literature review reflects this, addressing three strands of literature salient to this research: writings about stereotyping, Orientalism, and Othering in the media. The chapter thus begins by

looking at forms of reinforcing the distinction of us versus them, namely stereotyping and Orientalism, before looking at how this is manifest in the media. The review will show that Japan is often subject to both stereotyping and Orientalism in the media, but present literature cannot account for the coexistence of contradictory depictions of Japan.

Chapter 3: The methodology chapter sets out the ways in which the findings of previous studies can be built upon and used to inform this current study. It is well-documented that Japan is misrepresented in foreign media (Hammond 1999; Hargreaves et al. 2001; Hinton 2014; Mayes & Rowling 1997), and much has also been written on the way in which Japan is stereotyped. This study brings these literatures together to carry out an analysis of the ways in which stereotyping and Orientalism underpin and contribute towards this misreporting. The chapter will describe the methods used to obtain news articles for the case studies and the methods used to analyse them. It is not enough to say that these views are informed by stereotypical knowledge and are thus wrong, however, as stereotypical depictions are often based on truth, albeit generalised (Pickering 2001, 25). An important aspect of this research then is the carrying out of fieldwork to assess the differences between media depictions of technology use and technology use as described in interviews and seen in observation. The chapter will thus also describe the methods employed during the fieldwork component of the study, and demonstrate how all the methods selected for this study can be used in tandem to triangulate a convincing answer to the research problem.

Chapter 4: This is the first of two chapters, each of which looks at an example of a technology in Japan, and news articles pertaining to this technology are analysed for their use of, and reliance upon, stereotypical depictions, and are then set up against findings from fieldwork. The first case is that of 'fax-loving' Japan. According to articles published by major news sources, such as the *BBC* and *The Independent*, during the period of study Japan was a nation that could not give up faxing and was reliant upon the technology (Oi 2012; McNeill 2013; Fitzpatrick 2015). Analysis of these articles will demonstrate that these accounts draw heavily from stereotypical and orientalist assumptions of Japan. The claims made in these articles will then be compared against fieldwork carried out in Japan, during which a sample of Japanese companies was asked about their use of fax machines, and fax machine manufacturers were interviewed about the current fax market and its future. The

chapter will show that what has been written in newspapers and on news sites is somewhat different to the answers and explanations given by interviewees.

Chapter 5: This second case examines articles about high-tech Japan, taking robots as an example: a frequent news topic about technological Japan. News articles are analysed again for their reliance upon stereotyping and Orientalising in writing about Japan. Here Japan is depicted as being technologically superior to other countries, commonly utilising robots in customer-facing roles such as retail. Fieldwork conducted in Japan with companies using robots in their business and with robot manufacturers will show that this image is not entirely accurate, though through the comparison of claims made in articles with data gathered during fieldwork, the chapter demonstrates the extent to which these depictions are stereotypical and exaggerated.

Chapter 6: The findings of the two case studies are brought together in the penultimate chapter of the thesis, which is split into two parts. The first part of the chapter brings together the two case studies to discuss the puzzle at the core of this research: how can contradictory depictions of Japan's relationship with technology coexist in the British press? This section will demonstrate the contradiction is less 'real', and rather a function of stereotyping and orientalising. It will show how stereotypical depictions only present extremes: technology use is only presented as incredibly futuristic or incredibly backward. The second part of the chapter will then address how such depictions are perpetuated, by looking at the role of the journalist and journalistic process in the production of these articles and the perpetuation of these stereotypical depictions.

Chapter 7: The concluding chapter will bring together the findings of all the chapters, showing how they contribute towards answering the research question. Here the author will reflect on how this study challenges British media depictions of technology in Japan, as well as account for the existence of these depictions. The conclusion will explore the possible future evolution of depictions of Japan's relationship with technology, as well as situate these findings within a wider context, considering how they might contribute to future research on other stereotypical depictions of Japan. Lastly, the research strategy will be revisited and it will be shown how the multimodal approach, including the analytical framework for CDA devised for this study, can be applied more broadly to stereotypical depictions of other peoples and cultures.

Chapter 2: Literature Review

As the introduction showed, the perpetuation of stereotypical depictions in the news is a subject that has been much-discussed in academia, and inaccurate or even fabricated reporting has also come under scrutiny with the rise of fake news. While almost every group of people is subject to stereotyping (e.g. the stereotyping of racial groups like African-Americans, religious groups such as Muslims, or professions, such as nurses), the case of Japan has presented a particular puzzle for the study of stereotyping and representation: there is an apparent contradiction in the way that technology in Japan is depicted in the British press. Sometimes Japan is presented as a country that is behind technologically, while at others it is a country that is high-tech to the point of being futuristic. That the same aspect of Japan (its relationship with technology) is being presented in such seemingly incompatible ways is problematic. As will be seen in the literature on stereotyping, it is possible for contrasting depictions of a group to exist (e.g. Levy 2003), but these do not overlap and are deployed at different times. The puzzle is that these depictions are not separated by time or by publication, appearing within a few weeks of each other, in the same publication, or even in the same article. The introduction brought out the following question, which will be used to untangle this problem:

To what extent can stereotyping explain the coexistence and persistence of contradictory depictions of Japan's relationship with technology in the British press?

Through an analysis of news articles about Japan, both those that present Japan as low-tech, and those that present it as high-tech, the discourses running through them will be exposed and scrutinised. It is the intention of the author to achieve an understanding of how these opposing depictions have arisen by looking at the articles within the context of stereotyping and Orientalising in general. Moreover, the results of the analyses will be compared in order to understand how stereotyping and Orientalising can lead to different, and apparently contradictory depictions. In order to do this, however, it is first necessary to familiarise oneself with literatures on stereotyping and any extant research that has looked at how Japan has been depicted by other countries. Moreover, as the previous chapter explained, the stereotyping of Eastern cultures is closely associated with Orientalism, as originally conceived by Edward Said (1985). Stereotyping and Orientalism are both processes by which the

Other is defined by its difference to the observer, and in the third strand of literature reviewed, the manifestation of these forms of Othering in the media specifically will be considered together. The three main strands of literature covered in this chapter are therefore:

1. Literature about stereotyping
2. Literature about Orientalism
3. Stereotyping and Orientalism in the media

First, this chapter will examine literatures pertaining to the stereotyping process and stereotypical depictions. The study of stereotyping has not been limited to one discipline and consequently has been defined, as well as studied, in a number of different ways (Pickering 2001). The discussion will then move onto the stereotyping of Japan specifically. Here, historical representations of Japan will be considered, providing a narrative for the development of stereotypical depictions of Japan—how they have changed, if they have changed at all, and the external factors that contributed to such depictions of Japan, such as international relations, war, and popular culture. Through the course of this section, it will be demonstrated that Japan has been repeatedly considered in terms of its relationship with technology, leading to an analysis of literatures about Japan and technology specifically.

The second strand of the literature review examines Orientalism, which is the representation of the 'East' by the 'West', in particular the United States, Britain, and European countries that have historically colonised the Middle East, the Indian subcontinent and East Asia. Here it will be shown how Orientalism is related to stereotyping, as the specific application of stereotypical thought to the conceptualisation of the 'East' (Said 2005, 2). Orientalism has an explicit bearing on Japan, which will also be explored in this section, including a discussion of specific off-shoots of Orientalism that have been developed to consider the Japanese case, namely Self-Orientalism (Iwabuchi 1994), Techno-Orientalism (Morley & Robins 1995), and recently, Wacky Orientalism (Wagenaar 2016).

Lastly, the literature review will then consider these forms of Othering and their representation of the Other as they appear in the media specifically. The section will begin with a look at studies of the representation of the Other in the press, in both studies of stereotyping and those of Orientalism. Certain groups, often minorities, are often subject to Othering, which is the marking of them as deviant from the ingroup, however defined. In terms of foreign countries, those countries are often considered

Other as they are different to one's own country, which is considered the norm (Pickering 2001, 5). Previous studies of representations of Japan in foreign news media will be considered in order to elucidate the common depictions of Japan and how these are manifest—in words, images, and what is left unsaid. It will be shown that Japan is also regularly subject to being treated as the Other.

By the end of this chapter, it will be shown that the current literature available has not explained how contradictory depictions of Japan coexist, and nor is it clear what allows for these depictions to persist in the media. The literatures presented will, however, inform and guide this current research, including in its theoretical and methodological approaches, which will be discussed further in Chapter 3.

Stereotyping

As explained in the introduction (Chapter 1), this study deals specifically with stereotypical depictions, which are the particular instantiations of the larger stereotype. It is, however, necessary to consider stereotypical depictions as products of the stereotyping process and as manifestations of individual stereotypes. A survey of the literature on stereotyping by Pickering (2001) suggests that terminology referring to stereotyping is used differently by different researchers in different disciplines, the most notable distinctions being between their use in communication research and social psychology research, the two main disciplines to take up research of stereotypes.

While these disciplines differ in their approaches to the study of stereotypes, nevertheless both understandings are rooted in the work of Walter Lippmann, whose book *Public Opinion* (1922; reprinted 1997) coined the term 'stereotype' in the sense understood today, borrowing it from the printing industry. Originally, a stereotype referred to a metal plate used to duplicate book pages (Hamilton et al. 1994, 293). Lippmann argued that stereotypes served to save time in a fast-paced world, by 'fill[ing] in the rest of the picture' (1997, 59): a person or a group will display a trait that is recognised and associated with a stereotype already held, which is then applied. Lippmann was a journalist, rather than a psychologist, and his writings were based upon his own observations about the generalisations applied to groups. His opening chapter featured the term 'pictures in our heads' in its title (1997, 3) and this

basic, but evocative, preamble before 'stereotype' itself is introduced has influenced researchers and continues to be used (Hamilton et al. 1994; Gorham 1999).⁴

While Lippmann described stereotyping as a sensemaking process with an internal logic (Lippmann 1995, 59), there has been much debate over the accuracy of stereotypes and where these generalisations are sourced (Hamilton et al. 1994, pp. 293-307). A common, although not uncontroversial theory is the 'kernel of truth' hypothesis, which argues that although stereotypes are applied to entire groups, ignoring the individual, they 'nevertheless validly depict certain basic characteristics of social or ethnic groups' (Pickering 2001, 25). The weakness of this argument is that it would suggest that one can definitively measure how accurate a stereotype is, which as Seiter argues, 'fails to analyze the social origins and ideological motivations behind stereotypes and conflates their descriptive and evaluative dimensions' (1986, 17). As generalisations, however, the 'kernel of truth' hypothesis nevertheless holds some validity in the discussion of stereotypical depictions, rather than the discussion of the larger stereotype. It is not the aim of this thesis to question the accuracy of the stereotype of Japan, something which Gilman describes as a Sisyphean task (1985, 240). Rather, it is to analyse specific stereotypical depictions, and determine the accuracy of these highly specific instantiations.

Many researchers, such as Allport (1954), Gilman (1985) and McGarty (2002), have argued that stereotyping is a form of categorisation. One of the main proponents linking stereotyping to categorisation was Allport (1954), arguing that categorisation is a 'process underlying intergroup perception' (cited in Jost & Hamilton 2005, pp. 208f), though he stressed that stereotypes are distinct from categories, rather a stereotype is a 'fixed idea that accompanies the category' (Allport 1954, 191). This was also taken up by Tajfel who argued that categorisation had effects on judgement and, thus, prejudice towards others (1969). Building upon the work of these researchers, McGarty has created a model for category formation, to explain how stereotypes are formed (2002, 18), which has been reproduced in Figure 2.1, below.

⁴ While an analysis of every use of 'pictures in our heads' in academic writing is beyond the remit of this study, its significance is no less apparent. In the course of this literature review, database searches of instances of this phrase found 243 journal articles and books on the JSTOR database.

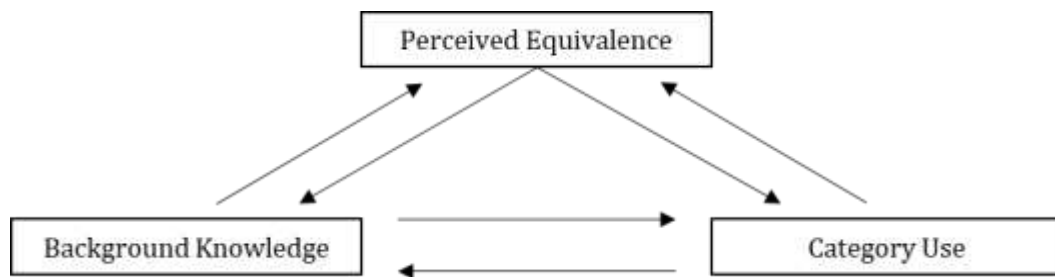


Figure 2.1 The Constraints Relation Model for Categorisation, Adapted from McGarty (2002)

The model above describes the process of categorisation, but can also be applied to stereotyping. 'Category Use' refers to the application of a label or category to a group. The background knowledge is the stereotypical knowledge described earlier; it is the set of understandings about group which inform and confirm a stereotype. Perceived equivalence relates to the way in which stereotyping emphasises difference between in- and outgroups, as well as emphasising the similarities between members of a group. All of these are cognitive processes, which inform each other, and taken as a whole can be called a stereotype.

Allport's qualification that stereotypes are not the same as categories highlights a problem with literature on stereotyping, viz. the ambiguity of terminology, owing to differing definitions and applications between researchers. McGarty's contributions to the literature go some way to fixing this problem by providing a taxonomy for understanding and using the different terminology used within studies on stereotyping in order to describe the stereotyping process (McGarty 2002). Here, McGarty distinguishes between three main, interrelated terms within stereotyping:

- Stereotype
- Stereotypical Depiction
- Stereotypical Knowledge

McGarty defines the 'stereotype' as 'the set of relations between knowledge, labels and perceived equivalences' (2002, 18). Understood in this way, stereotypes are not simply the application of labels to a group, or the perception of that group being similar (perceived equivalence), or the combination of knowledge about these groups, but rather a combination of the three, working together in order to make sense about the group (2002, pp. 17f). The actual application of the stereotype in the form of a statement or other communicative event is, in McGarty's taxonomy, a 'stereotypical depiction' (2002, pp. 18f). While these are what are often colloquially and informally referred to as stereotypes, McGarty argues that individual

stereotypical depictions are 'immediate, transitory and fleeting' (2002, 19). He thus prefers to reserve the term stereotype for the broader set of mental relations. Lastly, 'stereotypical knowledge' refers to long-term perceived knowledge about groups and their similarities and differences formed 'through learning associations and causal mechanisms and through the instantiation of stereotypical depictions' (2002, 33). While McGarty's taxonomy provides a useful clarification about the myriad of terms used in research on stereotyping, it is necessary to look to other studies on the effects of stereotyping, and this thesis' particular puzzle of contradictory stereotypical depictions of Japan.

Allport describes stereotypical depictions as inherently contradictory (1954, 190), but by this he means that it is possible to present different depictions of a group at different times. For example, Allport points to a study on the attitudes towards Jews in which contrasting attitudes were found to be simultaneously held by participants. Investigators found that Jews were simultaneously resented for keeping to themselves and outside the gentile population, but also resented for hiding their Jewishness and 'elbowing their way into Christian groups' (1954, pp. 194f). For those with prejudices, Allport argues, the fact that these views are inherently incompatible is not a problem as prejudiced people are not actually concerned with 'genuine group traits' (1954, 195), but rather with justification for their own prejudices (1954, 195). What this means is that if a certain explanation supports a prejudiced accusation at a given point, then it is activated, while if at a different point in time, an opposing explanation is more appropriate, then this is used (1954, 196). Here Allport makes the point that stereotyping is based on 'selective perception and selective forgetting', which allows for groups to be depicted positively on some occasions, while negatively on others (1954, 196). Allport himself argued that groups can possess positive and negative stereotypes, pointing to notions that African Americans (who are historically subject to negative stereotyping) are happier than other groups (1954, 198). Multiple studies have since expanded upon this, including Levy (2003), who carried out a study on the stereotyping associated with ageing. Levy found that stigmatised groups, such as the elderly, are likely to hold both positive and negative stereotypical depictions about themselves. Similarly, Hummert (1990) found that there are both positive and negative stereotypical depictions for the elderly and the young. Other studies have shown that positive stereotypical depictions can be as harmful as negative depictions (Czopp 2008; Kay et al. 2013).

While such studies confirm the existence of 'contradictory' stereotypical depictions, they are only contradictory in the sense that a group can receive both positive and negative stereotypical depictions, but at different times, depending on the situation (Allport 1954, 196). The puzzle of this current study is that both depictions of Japan are being activated regularly, and in some cases, even referenced within the same article. Moreover, explanations of negative stereotyping suffer from the generalising found in stereotypes themselves: Fiske, Cuddy, Glick and Xu (2002, pp. 878f) provide an explanation for the 'Asian' stereotype, citing the perceived high competence which results in positive stereotyping, but also the low warmth towards the group, resulting in negative stereotyping and resentment. Moreover, the high levels of competence displayed by 'Asians' can also result in negative stereotyping, due to perceived threat of the group being 'too competent, too ambitious, too hardworking', which they characterise as an 'envious stereotype' (Fiske et al. 2002, 880). While they offer a breakdown of the 'Asian' stereotype, of its positive and negative aspects (2002), it is not clarified as to what is even meant by 'Asian'. After all, according to the United Nations, the region defined as Asia is made up of fifty-five (recognised) countries, many of which are separated by hundreds of miles (United Nations 2014). Asia includes regions as different and distant from each other as China and Saudi Arabia, South Korea and Afghanistan, or Uzbekistan and the Maldives (United Nations 2014). Asia and Asians are thus reduced to a singular group, despite their many differences, the one common feature they share being that they are not in the 'West'. Such broad-stroked treatments are therefore not sufficient for considering the stereotyping of Japan, and therefore not fit for purpose for this study. It is as such necessary to turn to literatures about the stereotyping of Japan itself.

Stereotyping of Japan

If stereotypes are seen as fixed, as Allport describes (1954, 191), then it stands to reason that the depictions presented in this thesis are rooted in pre-existing notions of Japan, even if the specific contents of the depictions are new. Thus, only by considering stereotypical depictions of Japan across history, can one adequately engage in unravelling the depictions of Japan today. Western representations of Japan date back to first encounters with the Japanese by Portuguese and Dutch traders in the 16th century (Lozano-Méndez 2010, 184). However, it was not until the 19th century when Japan was forced to reopen to the West, following a 200 year-long period of isolation, that Japan really became a part of the Western imaginary.

Japanese art in particular, in the form of paintings, prints and crafts were readily consumed in Europe, leading to the development of *Japonisme*, the appreciation for Japanese aesthetics, which heavily influenced the development of the Impressionist art movement (Napier 2007, 8).

The expectation of difference is core to the process of stereotyping, which typically sets up the desirable qualities of the in-group against the perceived undesirable qualities of the out-group. From even the first encounters with the Japanese, it was difficult to apply the usual dichotomy of 'savage natives and civilised westerners' (Littlewood 1996, 3). Littlewood argues that Japan has a history of being stereotyped in terms of contrasts, and this dates back to those first Europeans to meet the Japanese in the sixteenth century (1996). On the one hand, the Japanese looked different and their customs were strange, but on the other, they were polite, had good etiquette and were concerned with honour (1996, pp. 3-6). Littlewood argues that these two contrasting images have been continually held ever since, pointing to Ruth Benedict's *The Chrysanthemum and the Sword* (1946, reprinted 2006), an anthropological study of the Japanese people that has sold over two million copies worldwide since its first publication. He argues that works such as these present Japan in terms of 'paradox and contradiction (1996, 7): at once possessing the refinement of the chrysanthemum and the brutality of the sword. In more contemporary terms, he suggests that this explains the contradictory simultaneous presentations of tradition and technology in Japan (1996, 7).

This would appear to suggest that contrasting depictions of Japan are to be an expected feature of Western, stereotyped representations of Japan. While they are contrasts, the tradition of the temple and its festivals does not get in the way of Japan also having a high-tech metropolis. The suggestion that Japan is both low-tech and high-tech, however, is more than a contrast, it is a contradiction, since they overlap. Littlewood's analysis of these contrasting depictions has some bearing on this present study, but Littlewood was referring to separate dimensions of Japan: the traditional dimension of Japan, as embodied by temples, religious festivals and so on, and the modern dimension of Japan, characterised by the Tokyo metropolis and multinationals. As Hood (2015, 12) points out, these contrasts are not unique to Japan, citing the example of London having modern skyscrapers sitting alongside old terrace houses and even older churches. Thus, the puzzle of the contradictory depictions of technology remains.

In terms of recent representation of Japan, Morris (2011) contends that in the latter half of the twentieth century, and to some extent to this day, Japan has been characterised as a ‘problem’ for the West (2011, 3). This was not a problem of understanding the country, however, but rather the ‘problem’ was that Japan posed an economic threat, particularly to the United States. This ‘Japan-bashing’, as it came to be called (2011, 3), was employed not only in news media or in business, but even in academic and political discourse (2011, 3). Morris argues that negative and critical attitudes towards Japan were particularly prevalent in the 1980s, though first arose in the 1970s (2011, pp. 2-5). He attributes such negativity to the decline of the Soviet Union, which saw the United States suddenly without an enemy, and the consequent necessity to identify a new foe (2011, 136). While he argues that Japan-bashing still occurs in Western discourses, he also identifies two subsequent phases of Japanese representation: Japan-passing and Japan-nothing (2011, pp. 120f).

One book that gained a certain level of prominence and even notoriety during this period was *The Japan That Can Say No*, written by politician Shintaro Ishihara and then-Sony chairman Akio Morita (1991).⁵ Although its official English translation was not published until 1991, it had caught the attention of the Pentagon in 1989, which pirated and translated the original, supposedly out of concern for Ishihara’s call for Japan to stand up to the US and not take this Japan-bashing (LA Times 1991). When the country’s economy began to decline in the 1990s, however, a more derisive attitude of ‘Japan-passing’ came into use (Morris 2011, 120). Interestingly, this phrase was first used in Japan, and refers to the United States ‘surpassing Japan economically’ and ‘also bypassing it in favour of engagement with other nations, notably China’ (2011, 121). This was then followed by the term ‘Japan-nothing’, a time when it was a struggle to convince people that Japan mattered (2011, 121). As a study of predominantly American attitudes towards Japan, Morris’ book is not immediately useful to this project, which focusses on *British* representation of Japan, since American ideas about Japan are rooted in its historical relations with Japan, particularly during and post-WWII (2011, 136). However, his book clearly articulates the prevalence of negative attitudes underpinning writings about Japan and highlights the importance of considering the biases of information sources. Moreover, he encourages readers not to uncritically apply the label of ‘Japan-bashing’ to any

⁵ Morita contributed to the original 1989 Japanese version “*No” to Ieru Nihon* but his contributions are not found in the English translation (LA Times 1991) and later distanced himself from the publication (Stevens 2012).

negative piece of writing about Japan, of which he argues the Japanese are particularly guilty (2011, pp. 126-128). This last point has been incorporated into the research strategy of this project, and has informed certain methodological aspects of the study, including the decision to approach foreign journalists writing about Japan, in order to present a balanced view.

Whereas Morris focussed on the general stereotypical attitudes of Westerners towards Japan, Matsumoto (2002, 35) compiled a list of, and attempted to disprove, seven 'well-known and well-accepted' depictions of Japan. He is quoted directly here because he provides no further justification for his choice of these particular seven over other depictions and does not indicate whether these are even the most well-known depictions of Japan. The stereotypical depictions Matsumoto examines are: the collectivist culture of the Japanese (2002, pp. 37-47); the Japanese concept of self (2002, pp. 47-53); Japanese interpersonal consciousness, i.e. awareness of others (2002, pp. 54-57); the Japanese never show their true emotions (2002, pp. 57-66); the Japanese salaryman who sacrifices his life for the company (2002, pp. 67-74); the lifetime employment system (2002, pp. 74-79); and Japanese marriage and traditional gender roles (2002, pp. 79-84).

Although he provides little justification for his choices, Matsumoto's work is still of interest as he systematically goes through the stereotypical depictions, unravelling them and proving their inaccuracy by appealing to statistics, polls and his own empirical research. At the beginning of his book he makes the interesting observation that 'academics and laypersons alike, as well as Japanese and Westerners, have all painted the same picture, and these stereotypic images and perceptions of Japan have, for all intents and purposes, *become* Japan' (2002, 2). This comment is worth picking out for two points it makes: (i) the idea that the Japan often depicted is not Japan at all, rather an imaginary Japan that has been collectively imagined; and (ii) that the Japanese are guilty of stereotyping themselves. Self-stereotyping is not unique to Japan, but it is usually discussed in terms of minority groups with little-to-no representation, such as the media invisibility of Native Americans (Leavitt et al. 2015).

Despite the acuity of his analysis, the biggest deficiency in Matsumoto's work is its inconsistency in terminology. At no point does Matsumoto give the reader a clear definition of what he means by 'stereotype', assuming it to be understood by the reader. As has already been discussed, however, the word 'stereotype' has been defined in many ways since it was first repurposed by Lippmann from the printing

industry. Moreover, as well as 'stereotype', Matsumoto uses many other terms interchangeably, including 'notions' (2002, 1), 'stereotypic images' (2002, 2 & 16), 'perceptions' (2002, 2), 'stereotyped depictions' (2002, 16), and 'images' (2002, 19). According to the taxonomy established by McGarty (2002), Matsumoto's study is actually about seven stereotypical depictions of Japan. This thesis aims to reduce this kind of ambiguity by adhering to McGarty's definitions.

Returning to Matsumoto's observation that Japan has been imagined, rather than accurately depicted (2002, 2), it is worth briefly mentioning the ideas of the 'imagined community' as conceived in Anderson's *Imagined Communities* (1991), as well as Barthes' construction of Japan as a 'fictive nation' (Barthes 1983, 3). While not explicitly addressing either stereotyping or Japan, Anderson argues that nationality and nationalism are constructed artefacts (1991, 4) and that the nation, as a community, is imagined 'because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion' (1991, 6). Anderson only considers the creation and sustaining of one's own imagined community in the pursuit of national unity (1991), rather than the imagining of other countries. However, as will be seen in the third strand of literature, *Stereotyping and Orientalism in the Media*, imagined communities have some bearing on this study.

While Anderson focusses on the conceptualisation of one's own nation, Barthes creates a fictional Japan in his *Empire of Signs* (1983), using the idea of Japan as a springboard for opening up a 'whole fictive realm' (Barthes 1983, 6). Barthes created this Japan in order to study the importance of symbols, with Japan as the eponymous Empire of Signs; however, as Hood (2015, 5) points out, the Japan described is 'recognisable as being the country that Barthes had visited, without any linguistic knowledge of the Japanese language, in 1966', seventeen years before the publication of the book. If anything, Barthes confirms the stereotyping of Japan in his investigation of symbols, such as through the description of Japanese cuisine and the 'virginity of its cooking' (1983, 25), or the pachinko (a popular arcade game) parlour, where the players are described as part of a 'hive' (1983, 27), appealing to the stereotypical depiction of Japan as collectivist. In using Japan as a setting for his study, Barthes inadvertently demonstrates the ways in which Japan is persistently characterised by its stereotypical depictions, not least through his insistence that it is an imaginary place (1983, pp. 3-9).

Literature on stereotyping, while acknowledging the existence of contrasting stereotypical depictions, cannot adequately explain the present puzzle of contradictory depictions of Japan in the British press. How is it that a country, in this case Japan, can be technologically backwards and advanced at the same time? As discussed above, the contrasting depictions of tradition and modernity cannot adequately explain this puzzle, as these depictions of technology not only directly overlap, but they happen within a shared time-period, or even within the same article. In discussing the stereotyping of Asian countries such as Japan, another strand of literature must be examined: Orientalism. This is the specific conceptualising of the East as Other, which positions the West as superior through the essentialising of the East (Said 1978). Orientalism will first be considered in its application to the East in general, before examining literature pertaining to the specific Orientalising of Japan in order to see if it can explain the puzzle of contradictory depictions of technology in Japan.

Orientalism

In the introduction of this thesis (Chapter 1), the East vs West dichotomy was briefly explained in the section on key concepts, and this division is at the core of Orientalism. Often associated with the eponymous work by Edward Said, Orientalism is the 'Western style of dominating, restructuring, and having authority over the Orient' (1978, 2). Such attitudes, it is argued, serve to reinforce the idea of the West as being superior to the East, particularly as many of these stereotypes arose during Western imperialism in the Middle East and Indian subcontinent (Macfie 2000, pp. 1-3). The terms 'East' and 'West' are highly problematic, however, something that Said himself stresses (though it does not prevent him from using the terminology and emphasising the actions of the 'West' – something that will be discussed later). They are a sociological dichotomous divide, splitting the world according to perceived differences. According to Said, the 'East' is made up of countries in the Middle East, North Africa and the Indian subcontinent, that is, chiefly Islamic countries, and those which have a history of European colonialism (1978, 1). He also widens his definition to include the 'Far East', which includes China, Korea and Japan, as these are the countries with which the United States has had long-standing relations with, and no history of colonialism in the Middle East (1978, 1). Meanwhile, according to Said, the 'West' is made up of European countries, Russia and the United States (1978, 1).

This is not the only definition, however, and is problematised by geographic factors such as the fact that Russia stretches across both the continents of Europe and Asia, and that while Australia is closer to China and Japan than ‘Western’ countries, it is often considered part of the ‘West’. With regard to Japan specifically, Hood (2015, pp. 20f) writes that labelling countries as ‘East’ or ‘West’ is problematic as it is a matter of perspective: Japan is east of China (hence the name ‘land of the rising sun’), but from the Japanese perspective, the USA is further east still. Despite these terminological issues, the dichotomy remains prominent, reinforcing the division between *us* and *them*, between Self and Other.

Said’s work on Orientalism (1978, 1985, 2000, 2005) approached the critique of the inherent biases of Western observers from an almost exclusively Near/Middle East perspective. As a Palestinian Arab with American citizenship, he admits his own personal interest and inclination to focus on this particular region (Said 2005). While he recognises that his theory of Orientalism is only applied to Islamic cultures in his works, he asserts that it could be applied to the East as a whole—including the Far East: China, Japan, Korea, etc. (1978, 322). The immediate issue with this is that Said provides no justification for this assertion. His claim that *all* Eastern cultures are treated in the exact same way by ‘Westerners’, simply because they are all ‘Oriental’ (1978, pp. 1-5), is bold, particularly as the ‘East’ covers a large part of the globe and includes countries with wildly different cultures and histories. This is not to say he is wrong necessarily, but he provides no evidence. Indeed, his references to Japan and other East Asian countries are limited to being listed as other countries to which his discourse supposedly applies, often crammed between parentheses at the end of a long passage discussing Orientalist attitudes towards another country, such as India (e.g. 1978, 285).

If Said did not really consider Japan in his discussion of Orientalism, can it really be applied to the country? Since Said published *Orientalism*, its relevance and applicability to Japan has been widely discussed. Koichi Iwabuchi (1994), while not in disagreement with the tenets of Said’s Orientalism, argues that the case of Japan does expose some weakness. Said would argue that Japan’s discourse of the West is not Occidentalism (the reverse of Orientalism), because the prejudiced outlook of Orientalists is based on a position of power and domination (1978, 328), as exemplified by the colonial activities of Europe in the Middle East. Japan has no such power to dominate the West. Iwabuchi argues that Japan challenged Orientalist predictions for the country’s future, and actually surpassed the West in terms of

economy and technology (1994, n.p.). Iwabuchi stops short of claiming that the case of Japan is a challenge to Orientalism, arguing that the relationship between 'the West's Orientalist discourse on Japan and Japan's discourse on itself is characterised by a profound complicity' (1994, n.p.). Indeed, Iwabuchi sees it as an exchange-based relationship: the West stands in for the negative aspects of modernity, such as individualism (Occidentalism), whilst Japaneseness is emphasised through the perception of tradition (Orientalism) (1994, n.p.). Indeed, analysing the depictions of Japan by Western observers such as Chamberlain at the beginning of the twentieth century, and then later Reischauer, Iwabuchi shows that Japan was characterised by its myths and 'invented traditions', which locked it in the past, such as references to samurai, which at the time made up only six percent of the population (1994, n.p.).

Steenstrup echoes Iwabuchi's response to Said, arguing that Said neglects to consider the differences between different countries' experiences with the West (Steenstrup 1986, 234). Much of Said's arguments are based on a power relationship between the colonial West and the subjugated East. Steenstrup argues that these arguments may not apply as Japan was never colonised (1986, pp. 234-236), but here he is ignoring certain colonial attitudes imposed on Japan by other nations, particularly the United States. Although never colonised by the United States in the traditional sense, Japan's period of isolation was only ended when steam ships under the command of Commodore Perry arrived at the ports near Edo on the 8th July 1853 demanding Japan open its borders for trade (Hijiya-Kirschner 1994, 178), and Japan was occupied by American forces after its defeat in the Second World War (Dower 1995); indeed, there are still American military bases in Japan today. Nonetheless, Steenstrup's point remains valid that there are considerable historical differences in the relations between the West and Japan and the West and the Middle East.

Another issue raised by Steenstrup is the use of the term 'Western'. Lumping together all countries from the United States to European nations under the grouping of 'the West' is very similar to how all Eastern countries are reduced to 'the Orient'. The terms West and Western are equally problematic since there are many differences between an American and a European, or an American and a Scandinavian (Steenstrup 1986, 240). Indeed, even these are still broad generalisations, as Europe is made up of forty-four countries, of which only twenty-eight are members of the European Union (EUROPA 2016), with distinct historical and cultural differences. The United States, too, is made up of fifty states, each with their own cultural differences.

Minear (1980) defends Said, arguing that despite the clear differences between the Middle East and the Far East, Oriental discourse is very real. While the power relations may be different in Japan, since it was never a colony, and was never considered of particular historical interest in the West (1980, 514), 'the attitudes manifested in the discourse on Japan seem to resemble closely those of Said's Orientalists' (1980, 515). Minear points to the great Japanologists of the last century: Basil Hall Chamberlain, George B. Sansom, and Edwin O. Reischauer. Despite being well regarded academics, even they reduced their studies of Japan to 'us versus them', often framing the West as superior. To address the differences between the Orientalism found in Japan-related studies and that with which Said was preoccupied, Minear presents three solutions: (i) to consider Japan as an exception; (ii) to ignore the specific historic setting of Said's argument and to focus on the general encounter between the West and the non-Western world; or, (iii) 'emphasize the extent to which the pursuit of knowledge involves the attempt to appropriate the reality of a subject' (1980, pp. 515f), reducing it to an object. Minear finds the first two solutions dissatisfying, preferring the third. He concludes that while Said may polarise academics, he successfully draws attention to a need to reconsider academic discourse on other cultures as well as helps expose the biases of even the greats (1980, 517).

The issue of power relations in regard to Japan's relationship with the West and the question of the applicability of Orientalism to the case of Japan has been further complicated by the uptake of Orientalism by Japanese scholars. Nishihara's study of the state of Orientalism in Japan argues that Orientalism is used in three ways: by students studying the Middle East, by those in Japanese Studies interested in the relationship between Japan and other Asian countries, and those in European Studies, who are interested in postcolonialism (Nishihara 2005, 241).⁶ This second point is of particular interest, as it highlights Said's blanket designation of all Asian countries as victims of colonisation, when Japan itself was an imperial power and had colonised its neighbours (2005, 243). In asserting itself as colonial power, Japan behaved like a Western state, and even took an Orientalist attitude towards its colonies (2005, pp.

⁶ For a discussion of the meaning of 'postcolonial' and the boundaries of postcolonialism, see Bahri (1995). The word 'postcolonial' itself can simply designate the second half of the twentieth century, as a framing device (Bahri 1995, 52), but complications arise with the notions of postcolonial discourse and postcolonial studies, which have varying definitions (Bahri 1995). For our purposes here, it can be understood as the theoretical approach to understanding the impact of colonisation and colonial ways of thinking on former colonies.

245f). Japan's status as a former imperial power, however, does not prevent Japan from being discussed as an Orientalised country, according to Nishihara, as Orientalism is about the observing of the East by the West, and the West has employed Orientalist discourse about Japan in spite of its adoption of Western elements (2005, 245).

Japan-Specific Orientalism

While Japan has been the object of Orientalism by the West, the country has often Orientalised itself, something Miller called 'self-Orientalism' (1982). Unlike other countries, which are often painted as victims of Orientalism, Japan has constructed a discourse that purposefully distinguishes itself from the West. Much as the picture of the 'Orient' created by Orientalists is largely fictitious, Japan has created its own imagined West. Iwabuchi cites several reasons for this: (i) Western countries can be presented as 'superior, enlightened and civilised entities to be emulated' by an aspirational Japan; (ii) at the same time, however, the West is also presented in a negative light, its societies individualistic and selfish; and (iii) Japan's self-Orientalism serves as a source of national identity (Iwabuchi 1994, n.p.). By defining itself as the diametric opposite to the West, Japan embraces its otherness (Gluck 1985). For example, the Japanese government's *Cool Japan* campaign, described by Kirsch as a 'nationalist project' (2016, 209), has been actively engaged in cultivating a particular image of Japan. Japan is shown to be 'desirable' (2016, 206), but the dichotomy of us vs them is enforced and emphasised, highlighting Japan's uniqueness and a destination for travel, while making it clear that one cannot become Japanese (2016, 209).

Within Japanese academic discourse, and within Japanese political ideology itself, the idea of Japan as a contrast to the West has long been the source of Japanese cultural identity. Japan is '*sui generis*', Japan is '*unique*' (Stockwin 1999, 2). Japan has interacted with Western nations, taken on and adapted their technologies, institutions and infrastructures, but it has never become any less Japanese. This discourse is known as *Nihonjinron* or 'theories about the Japanese', and is based on the assumption that Japan is unique. Many scholars have branded *Nihonjinron* a form of cultural and ethnocentric nationalism (van Wolferen 1989). Orientalist discourse labels Japan as collectivist and the West as individualistic, but while Orientalists use this point to highlight the West's superiority, under self-Orientalism and *Nihonjinron*, Japan's collectivism becomes a strength (Iwabuchi 1994, n.p.). This is interesting,

because Orientalism, as defined by Said (1978), is intended to emphasise the superiority of the West and the inferiority of the East, and not vice-versa. Although self-stereotyping is not unique to Japan and is carried out by a number of groups, as the studies by Czopp (2008), Levy (2003), etc. show, Latrofa, Vaes, Cadinu and Carnaghi found that minority groups are far more likely to do this than 'high status groups' (Latrofa et al. 2010, 912-919).

The above studies demonstrate that while Orientalism has been used by academics within the field of Japanese Studies to discuss the representation of Japan, both by Westerners and by the Japanese, as discussed previously, Orientalism in its original form as described by Said (1978) does not directly apply to the case of Japan, which is also capable of self-Orientalism. To account for these differences, multiple forms of Orientalism have been theorised to account for the case of Japan: Techno-Orientalism and Wacky Orientalism.

The term 'Techno-Orientalism' was coined by David Morley and Kevin Robins (1995) and refers to the discourse that 'the country has come to epitomize a hyper-technified, dehumanized and materialist society' (Lozano-Méndez 2010, 183). The Techno-Orientalist image of Japan is complex, since not only does it present an image of a high-tech, almost futuristic image of Japan, filled with advanced technology and robots, it characterises the Japanese as robots themselves, devoid of emotion, feeling and humanity (Lozano-Méndez 2010, 183; Morley & Robins 1995, 172). Lozano-Méndez (2010, 184) sees Techno-Orientalism as a 'new spin' of Orientalism that co-exists with it, bound up in the same traditions of prejudices. Much like 'traditional' Orientalism (hereafter Saidian Orientalism), the success of the Techno-Orientalist image is due, in part, to Japan's own appropriation of the identity through self-Orientalism (2010, 185). This image of Japan was popularised in Western film and literature, particularly during the 1980s with the emergence of the cyberpunk genre, characterised by novels such as William Gibson's *Neuromancer* (1984), and Ridley Scott's film *Blade Runner* (1982). Gibson himself said in an interview:

Modern Japan simply was cyberpunk. The Japanese themselves knew it and delighted in it. I remember my first glimpse of Shibuya, when one of the young Tokyo journalists who had taken me there, his face drenched with the light of a thousand media-suns - all that towering, animated crawl of commercial information - said, 'You see? You see? It is Blade Runner town.' And it was. It so evidently was.

(Quoted in Blanc & Odell 2014, 23)

Russell (1998, 102) adopts slightly different terminology, 'tech-*noir* Orientalism', to describe the same depictions of Japan in America, and the cyberpunk genre specifically. Russell argues that the depictions of Japan in film and literature rely on traditional and Orientalist stereotyping of Japan as exotic and decadent, albeit transposed to a neo-noir setting (1998, 102). Even though Japan is depicted as technologically advanced, the country nonetheless remains the Other—even 'primitive' (1998, 104)—and is depicted 'almost always as a corrupt, repressive, sexist, and racist society which while technologically advanced, remains trapped in the 17th century' (1998, 98). Thus, while Japan can be portrayed as possessing a high level of technology, this does not elevate it above Orientalism to the West's equal, since the mere possession of technology does not make a nation civilised. Indeed, Russell argues that in these Orientalised depictions, Japan lacks the 'controlled Western will' (1998, 104) to control its technology and is thus a threat to the West. Russell situates this attitude as a continuation of earlier depictions of Japan, specifically the 'yellow peril' of the early 1900s, in which Japan was perceived as a threat to Anglo-American hegemony (1998, pp. 95-97)

While Japan may have been seen as the future, the success of Japanese companies in the 80s was viewed with mistrust and disdain by Western observers. For example, the purchasing of iconic American properties such as Columbia Pictures & Records by Japanese companies was seen as a colonisation attempt 'through the absorption of economic and cultural assets' (Lozano-Méndez 2010, 188). Indeed, in films such as *Blade Runner* (Ridley Scott 1982), while the setting is not Japan, but Los Angeles, the Japanisation of America is all but clear with Japanese characters in neon, countless noodle bars and Japanese women in the advertisements. In the case of Techno-Orientalism specifically, clear links can be made to the period of Japan-bashing, as negative imagery of technological Japan was used to criticise the country and emphasise its differences to the West.

With the exception of Lozano-Méndez (2010), few academics have written extensively on Techno-Orientalism since Morley and Robins (1995). Some scholars such as Ueno (1996) and Niu (2008) have written about Techno-Orientalism within the context of popular culture and fictional representations of Japan and Asia. In such treatments, these fictional depictions of Japan cast the country far into the future, at least on a technological level, such as in *Neuromancer* and *Blade Runner*. One other work to have received considerable attention is the 1993 film *Rising Sun*, directed by

Philip Kaufman and based on a novel by Michael Crichton bearing the same name (Russell 1998; Hammond 1999; Matsumoto 2002; Napier 2007). Niu argues, however, that China began to overtake Japan as the object of Techno-Orientalism in Western cyberpunk in the mid-1990s (Niu 2008, pp. 76f). Indeed, the edited volume entitled *Techno-Orientalism: Imagining Asia in Speculative Fiction, History, and Media* by Roh, Huang and Niu (2015) demonstrates the ways in which Techno-Orientalism can and has been applied to more and more Asian countries in recent years, though despite being a term coined to describe attitudes towards Japan, Japan receives considerably less treatment in this book than other countries. As with other works described above, the essays contained in this volume concern themselves chiefly with representations of Asia, and the underlying Techno-Orientalism thereof, in fiction. The purpose of the volume, the editors argue, is to show that while Orientalism has typically defined the West as modern by 'producing an oppositional and premodern East', Techno-Orientalism 'symmetrically and yet contradictorily completes this project by creating a collusive, futurized Asia to further affirm the West's centrality' (Roh et al. 2015, 7). That Japan is not the main focus of this collection of essays is not necessarily a problem, as the applicability of the term to a number of Asian countries, including China, India and Korea demonstrates the broad generalisations inherent in Othering.

'Wacky Orientalism' is, to the author's knowledge, the most recent contribution to Orientalism in relation to Japan, coined by Wagenaar in the article 'Wacky Japan: A New Face for Orientalism' (2016). Wacky Orientalism is the 'Western perception of Japan as weird' (Wagenaar 2016, 51), and this weirdness is used by the West to confirm its own normalcy (2016, 51). Central to this argument is that this weirdness is only perceived as such because Westerners are not interested in understanding it (2016, 50). Moreover, the perception of Japan as weird is reinforced through confirmation bias, in which tourists will actively seek out 'wacky' Japan, which reaffirms their existing beliefs (2016, 50-51). So far, Wacky Orientalism has not been taken up by any other scholars or used by Wagenaar himself as a theoretical framework; as such, in its current state the concept is not well-developed enough to be employed in this study.

Of the different forms of Orientalism discussed above, Techno-Orientalism is the most likely form of Orientalism to fit with the kind of background knowledge that a UK audience might have about Japan and its relationship with technology, as evidenced by the findings that Japan is often depicted as 'eccentrically passionate'

about technology (Hargreaves et al. 2001, 24). Saidian Orientalism may also be of relevance to this study, since it concerns the depiction of the East as backwards, which *a priori* is in line with the depiction of low-tech Japan. Self-Orientalism is more suited to the discussion of Japanese sources, such as Japanese newspapers, which are not discussed in this thesis. There will, however, be some consideration of Self-Orientalism in relation to interviews with Japanese technology manufacturers, who may be inclined to perpetuate the image of Japan as a technological world leader.

Although Techno-Orientalism would appear, *a priori*, to be the most appropriate form of Orientalism for explaining the puzzle in this thesis, no studies that consider the representation of Japan in news media through a Techno-Orientalist lens were found. As this study will demonstrate, Japan continues to be depicted in terms of its relationship with technology. By considering the current representation of Japan as Techno-Orientalist discourse, one can better understand how and why Japan is depicted the way it is. However, since the kind of texts this study will be analysing is news articles, it is also necessary to examine extant literature that has dealt with the specific manifestation of stereotyping and Othering in the news media.

Stereotyping and Orientalism in the Media

As stereotyping and Orientalism can occur in all modes of interaction, be it in spoken conversation, in politics and in the media, for this study of the news representation of Japan, it is necessary to focus on studies that have considered these processes of Othering in news media directly. First, general literature on media representation of the Other will be considered, before moving on to works that have dealt with the representation of Japan in particular. Othering was introduced as a key concept in the previous chapter. As was seen, Pickering associates the Other with the Barthesian idea of the 'myth' in which cultural signs are represented as 'essential types' (Pickering 2001, 48). Here, history is removed, as is the possibility of change. Both stereotyping and Orientalism are the subjugation and objectification of the Other (Pickering 2001, 71). According to Fürsich (2002, 2010), media representations of the Other are often 'entrenched' and 'predefined' (2010, 121), in line with Pickering's notion of 'essential types' (2001, 48). Contemporary mass media can be seen as a normalisation tool for constructing social reality (2010, 113). News media choose which stories to focus on, deciding which are important and which are not (2010, 113).

While the world is a lot more interconnected through globalisation, representations of Others are often mediated through news media, deciding what people should know about the world. Fürsich goes further than this and suggests that not only do news sources mirror the reality they choose to depict, but that they 'create reality and normalise specific world-views or ideologies' (2010, 115). Fürsich argues that journalists will always fall back on 'established and recurring "frames"' (2002, 59). While her articles suggest possible solutions to improving the representation of the Other, Fürsich acknowledges that a key issue is whether it is even possible to construct 'fair' knowledge about Others? (2002, 64). One of the biggest problems Fürsich identifies is that representations may omit the viewpoints of populations or ignore the population entirely. This act of 'silencing' is also known as 'symbolic annihilation' (2010, 121), which she says can result from limited or highly stereotypical portrayals of groups. Representations in the media can also present the Other as 'exotic' or 'abnormal' (2010, 121).

Fiske and Taylor echo this point in the characterise stereotypes as a kind of 'role schema' that 'organizes people's expectations about other people who fall into certain social categories' (Fiske & Taylor 1991, 119). Repeated stereotypical depictions thus create a role schema for that category and subsequent expectations of that category will be stereotyped accordingly. In terms of the media, the consequences for the repeated stereotypical depictions of groups in various media are manifold. According to Sparks, such media depictions lead to: the perpetuation of the status quo; the perpetuation of false expectations; and encourage the acceptance of the role schema (2002, pp. 171f). What Sparks means by these points is that the continued dissemination of stereotypical depictions in the media 'unfairly restrict[s] the diversity of social roles that individuals might hold' (2002, 171). For example, if attorneys are typically played by males in television programmes, this will perpetuate the role schema that men are more likely to be attorneys and the role schema that women are less likely to fill this role. While this may conform to actual statistics, the very perpetuation of this may prevent the real-world status quo from changing as viewers will base their expectancies on these depictions (2002, 171).

Othering in the forms of stereotyping and Orientalism clearly then have real consequences in the media, informing one's expectations about others (Fiske & Taylor 1991, 119), leading to false expectations (Sparks 2002, 17), and contrast our social reality (Fürsich 2010, 113). However, what is the mechanism that allows for contradictory depictions to be produced in the media? And why do journalists and

media figures stereotype at all? This ties in to Fowler's arguments about the ideological nature of news reporting (1991), introduced in Chapter 1. Fowler holds that all discourse is by definition ideological, and as such news is necessarily selected and transformed as part of a 'practice' of social construction (1991, 2). This social construction is the result of four processes: bias, which Fowler argues is a consequence of all discourse, since it is written or spoken from a 'particular ideological position' (1991, 10); news values, which refers to the newsworthiness of events; social and economic factors of news selection, that is the feasibility, the profitability, and the significance of a story to the newspaper; and stereotyping, which determines newsworthiness (1991, 17). As the mental categorisation and construction of the world, Fowler holds that stereotyping determines the other processes of bias and news values, too (1991, 17). Stereotyping frames stories so that they can be understood, through a 'mental pigeon-hole' (1991, 17), and the news is an important means of reinforcing stereotypes, through the reporting of events. Moreover, the stronger certain stereotypical depictions are, the more likely that related stories will become news (1991, 17). Fowler gives the example of the Chernobyl disaster in 1986, which consolidated stereotypical knowledge about nuclear accidents and resulted in elevated reporting of events at nuclear locations (1991, pp. 17-19). This can even be seen in this thesis' own example of Fukushima, which led to increased discussion about nuclear safety in Britain and across the globe (McGrath 2011; Rogner 2013).

Fowler's social construction news is not the only explanation for the prevalence of stereotyping, as a review of different academic perspectives towards stereotyping by Lasorsa and Dai (2007) shows that there are a number of different potential reasons why stereotyping continues to be a feature of the press. The sociological perspective, as advocated by Tuchman (1978), would suggest that journalists 'typify' events so that they can decide how to proceed with the story, making expectations about who may be involved and what will follow (Lasorsa & Dai 2007, 281). Meanwhile, a cultural perspective, as advocated by Soloski (1989), suggests that stereotypical depictions are used by journalists when events are unfamiliar and would otherwise be difficult to comprehend to the audience (Lasorsa & Dai 2007, 281). Lastly, a psychological perspective on stereotyping, as advocated by Bishop and Trout (2004), suggests that stereotyping occurs when 'job demands' impede information processing and the story is sorted into a 'prototype', around which a theory is built (Lasorsa & Dai 2007, 281). Shared among these viewpoints, argue Lasorsa and Dai, is

the idea that 'in the presence of a mass of potential facts, stereotyping tends to occur to streamline work and ease the perceiver's discrepancy between what is expected and observed' (2007, 281). Lasorsa and Dai go on to argue that journalists must be motivated in order not to stereotype (2007, pp. 282-291) and that such journalists write 'authentic' stories (2007, 283). Those who do not are termed 'deceptive' reporters, who lack the motivation to write accurate stories and instead fall back on established stereotypes (2007, 281).

Similarly, Donsbach's (2004) study of the causal explanations for the way the news is reported by journalists considers a number of cognitive and psychological processes that influence the way in which a story is written. Most significantly for this argument, Donsbach considers perception to be a major influencing factor for explaining the way in which news is reported, going as far as saying that 'most of journalists' work is about perceptions' (2004, 136). Donsbach argues that journalists' predispositions towards issues, that is, their subjective beliefs, affect their news decisions, such as the selection of a specific story (2004, 135). The main hypothesis of Donsbach's argument is twofold: that in making news decisions, there is 'a need for social validation of perceptions' (2004, 136) and 'a need to preserve one's existing predispositions' (2004, 136). Such validations come from the creation of a 'shared reality' through communication with peers (2004, 140). That such a shared reality is constructed through similar perceptions held by colleagues, however, does not justify the belief that these judgements are valid. Aside from their peers, journalists observe the larger media reporting, such as national media and newswires, to inform their reality (2004, 140). A consequence of this can be that if a certain type of event occurs, such as a disaster, their presence in the media may lead to an increase in reports about similar events in the proceeding period (2004, 142).

Donsbach frames the need for social validation of perceptions as a sociopsychological concept, whereas the need to preserve one's extant attitudes is a cognitive-psychological concept (2004, pp. 150f). As such, there are comparisons to be drawn between Donsbach's hypotheses and the arguments made in Lasorsa and Dai's study (2007). Whereas Donsbach describes only two ways in which perception affects news decisions, Lasorsa and Dai present three: a sociological perspective, a cultural perspective and a psychological perspective (Lasorsa and Dai 2007, 281). Indeed, the presence of a third hypothesis in Lasorsa and Dai's study can be explained by their treating separately what Donsbach categorises together, as their hypothesis of a

'cultural' factor is present in Donsbach's study, too, albeit considered as part of the other two hypotheses.

Another study by Stocking and LaMarca (1990) found that journalists begin their research into a story with a hypothesis, but such hypotheses differ to those found in science as they are stimulated by not only external stimuli (that is, sources), but also internal stimuli (their own perceptions). Indeed, according to Donsbach, often attitudes towards an issue are affected by the institutional objectives of their publication, expectations to which journalists are expected to meet (2004, 134), as well as their own subjective beliefs (2004, 135). Donsbach links institutional objectives to the 'tabloidization' of the news, and suggests that it is the editors who exert pressure on journalists to 'highlight specific topics' and 'use attractive formats' to appeal to the audience (2004, 134).

Although these theories are useful and will be incorporated into the methodology (Chapter 3), the term 'deceptive' as used by Lasorsa and Dai is highly loaded, indicative of an intentional deception on the part of the journalist. Indeed, while Lasorsa and Dai suggest that some stereotypical depictions could be intentional, motivated by contempt for the subject or a desire to further their own career (2007, 291), they appear to ignore the reasoning for stereotyping as revealed by their own literature review. Although they acknowledge that stereotyping is often a product of 'automaticity' and that this is the most 'plausible reason' (2007, 291), which is corroborated in this thesis' own literature review, they attribute this to the reporter being 'cognitively lazy' (2007, pp. 290f).

Beyond stereotyping, other explanations have been given for misrepresentation in the press, one of which is Frankfurt's theory of 'bullshit' (2005). Bullshit is a form of misrepresentation which 'does not necessarily aim to misrepresent factual matters or what the bullshitter believes about those facts' (Steffensen 2018, n.p.). Unlike fake news, introduced in Chapter 1, bullshit is not lying, as it is 'impossible for someone to lie unless he thinks he knows the truth' (Frankfurt 2005, 14). Bullshit is concerned with getting away with seeming as if one possesses knowledge, rather than trying to actually convince a person of that reality (Frankfurt 2005, 14). Frankfurt contends that bullshit is 'unavoidable whenever circumstances require someone to talk without knowing what he is talking about' (Frankfurt 2005, 15). Returning to Lasorsa and Dai's study (2007), it is possible to link this to stereotyping, as if a journalist does not have specific knowledge about a topic, then they may resort to stereotypical depictions (2007, 281), producing the kind of bullshit Frankfurt describes. Indeed,

Frankfurt describes bullshitting as involving ‘a kind of bluff’ (2005, 11). Linking bullshit to journalism specifically, Steffensen suggests that journalists ‘most often hope that their deception is in accordance with the truth’ (2018, n.p.), and that their bullshit is a product of inadequate expertise and the pressures of the 24-hour news cycle, as well as ‘the casualisation of labour, the informatisation of social and economic relations, and the epistemic dominances of the English-speaking world in particular and the Western world in general’ (2018, n.p.). While bullshit could potentially explain the pervasion of stereotyping and Orientalism in the news, due to inadequate knowledge on the part of the journalist, Frankfurt does not deal with stereotyping specifically. Meanwhile the studies of Donsbach (2004), Lasorsa and Dai (2007), and Stocking and LaMarca (1990) address similar issues, but root these in cognitive processes like stereotyping, making their studies far more relevant for this thesis.

The above literature has considered the processes by which journalists may typify events, perpetuate biases, and propagate stereotypical depictions, but none of these studies specifically considers the reporting of Japan, nor do they account for contradictory depictions in the press. Therefore, it is now time to turn to the specific representation of Japan in the press

Media Representation of Japan

In 1998, a New York-based group of Japanese academics and professionals published an English-Japanese parallel language book called *Japan Made in U.S.A / Warewareru Nihonjin* which commented on the misrepresentation and Orientalism inherent in American news journalism on Japan (Zipangu 1998). The volume takes particular aim at the *New York Times* (NYT), with one section entitled ‘The 10 Worst NYT Stories on Japan’ (1998, pp. 8-9). The book examines how certain types of story appear more regularly and how claims are often exaggerated to the point of being demonstrably false, such as a response to an NYT article that claimed a pornographic magazine was the most popular among women in Japan (1998, pp. 92-97). *San Francisco Chronicle* journalist Charles Burrell writes that women are a popular theme in American newspapers because it allows readers to see ‘how backward Japan really is’ (1998, pp. 49-50). In an interview with *The Japan Times*, the editor Hideko Otake said that journalists should not be ‘looking down and observing a show, without an obligation to learn about the society in which they are placed’ (Negishi 1998). While the volume shows the issues of misrepresentation affecting the reporting of Japan, such as bad

translations and factual inaccuracies, the argument of the book is one-sided, with blame attributed solely to journalists. As Shreiber notes in the *Mainichi Daily News*, the ‘writers’ anger’ is clear (Shreiber 1998), and is evident in the Japanese version of the title *Warewareru Nihonjin*, which translates as ‘Ridiculed Japanese’, which is completely different to the English title.⁷

Moving on to a much more central issue for this thesis, namely British news representation of Japan, Hargreaves, Inthorn and Speers (2001) analysed a corpus of British newspaper articles about Japan from a range of different newspapers, spanning a period of ten years, from 1990 to 2000. The study found that, despite the globalisation of Japanese goods and cuisine, news media continue to fall back on ‘ancient characterisations’ (Hargreaves et al. 2001, 1). According to Hargreaves, Inthorn and Speers, previous studies of media representation of Japan have established that Japan is often presented as unique, bordering on strange or weird (2001, pp. 2f). The study found news about Japan in the period studied tended to focus on two points: Japan’s ‘strangeness’ and Japan’s ‘economic impact’ on us (2001, 29). For Hargreaves et al., the ‘us’ is an important explanatory factor in the prevalence of such stories. News is consumed by an audience, and so has to interest that audience. Strange stories are common ‘entertainment’ stories, whilst stories about Japan’s economic impact on Britain are popular because they hold relevance for the reader—Japan is exerting some local influence (2001, 29). The study also found that technology was a dominant theme for stories (2001, 5). Their analysis of a sample of technology-related articles found representation of the Japanese relationship with technology to be ‘distinctive’, with the Japanese portrayed as ‘eccentrically passionate about gadgets’ (2001, 24).

While useful, the study is only so to a certain extent, insofar as the data collected and presented is now over fifteen years old, and the reporting of Japan is likely to have changed, not only in the news being reported, but the ways in which the news is reported and consumed. Indeed, the news landscape itself has changed considerably, with more people obtaining their news online than from print newspapers (Ofcom 2015), and some publications, such as the major newspaper *The Independent*, have ceased having a print edition at all (Sweeney 2016). Moreover, a number of significant

⁷ Although different, both titles are plays on words: the English-language title is a reference to country of origin labels for manufactured products, suggesting that ‘Japan’ is an American construct, at least in terms of its news depictions. The Japanese title, meanwhile, *Warewareru Nihonjin* plays on the phrase *ware ware nihonjin* (我々日本人), meaning, ‘we Japanese’. This phrase is typically associated with *Nihonjinron* discourse, emphasising Japan’s superiority and uniqueness (Nester 1990, 332).

events have occurred since the study, including the 2002 FIFA World Cup co-hosted by Japan and South Korea (FIFA 2018), the March 2011 Tohoku earthquake and tsunami, which led to the meltdown of the Fukushima Daiichi Nuclear Power Plant (Kingston 2012); the hosting of the G7 summit in May 2016 (MOFA 2016); and also Japan's successful bid to host the 2020 Summer Olympics (Gibson 2013) and their subsequent build-up.

More recently, Hinton (2014) focusses on the representation of Japanese popular culture in the British media. He argues that the interpretation of Japanese popular culture is dependent on the cultural 'context of the viewer', and so the British interpretation will be different to other countries' (2014, n.p.). According to Hinton, representation of culture is complex, and different 'tropes' are 'applied in different contexts depending on the motivation' (2014, n.p.). In the case of Japan, stereotypical depictions of Japanese men emphasise their distinctiveness from 'Western man'. He references two distinct male stereotypical depictions, the traditional samurai image, which contains both admiration and fear of the Other, as well as the young Japanese man of Cool Japan. This modern depiction of the Japanese man is 'immersed in a technological Tokyo [...] of computer games, manga, and anime' (2014, n.p.). These are just two stereotypical depictions of Japanese men, however, and others exist, too, such as the salaryman, as mentioned by Matsumoto (2002). Depictions in Britain are not necessarily positive, however, as Hinton points to a number of representations of the Japanese on British television, such as the late-night BBC programme *Japanorama*, which highlighted the 'exotic and the different', as well as the dubbed version of the Japanese gameshow, *Takeshi's Castle*, which Hinton argues served to reinforce interpretations of the Japanese as odd (2014, n.p.).

One of the problems facing the representation of Japan in the media, Hinton writes, is that the Japanese context is not given. Rather, the British media are mostly concerned with emphasising Japanese distinctiveness. This has resulted in highly exaggerated and stereotyped stories appearing in the British press over the years. Hinton gives the example of news articles about *enjo kōsai*, a form of compensated dating, in which young women would provide men with company for a fee. In the Western media, Hinton (2014, n.p.) says, this was hyped up and presented as a widespread practice of 'lolitas' engaging in underage sex, despite the fact that very few schoolgirls actually did *enjo kōsai*. Moreover, Hinton (2014) argues that the media missed the cultural context of *enjo kōsai*, in which girls were able to subvert gender expectations by making money for themselves.

Hinton also gives the more recent example of the 2013 BBC documentary *No Sex Please, We're Japanese*, a programme about Japan's falling birthrate and declining population, and yet the 'only Japanese men under pensionable age interviewed were two men identified as otaku' (2014, n.p.). Here, the presenter gave the impression that these men were typical of Japanese men, and also tried to portray them as deviants for playing a simulation game about high school students dating. Again, this is what Hinton argues is a lack of context, and he points out that simulation or 'sim' games are very popular with men of the same age in Britain too. Hinton's article establishes the British media's predominance to define the Japanese by their differences with the British. However, his article concerns itself chiefly with the 'weird' and 'deviant' representations of Japan. While articles about Japan's technology use have expressed surprise, and have focussed on the differences between Japan and the UK, this present research is not so much concerned with depictions of 'deviance', but rather with the dual depictions of Japan as low- and high-tech.

Not all representation of Japan is purely negative, however. Dobson's analysis of depictions of Japan in *The Simpsons* reveals a high degree of stereotyping of Japan, including a number of common stereotypical depictions about the Japanese, including the kind mentioned above, but Dobson argues that often the writers employ such stereotypical depictions in a 'hyper-ironic' fashion (Dobson 2006, 58). The writers are in fact aware of the inaccuracy of such depictions, and use these depictions to expose the prejudices of the viewers, by subverting expectations, and ridicule American perceptions (2006, pp. 59-61). However, it is unlikely that the press are engaging in hyper-irony, since *The Simpsons* is a comedy programme, whereas news reporting—while there are elements of humour—is expected to adhere to the presentation of factual information. Nor is the stereotyping of Japan limited to Anglophone media, as Pellitteri's study of news representations of Japan and Japanese culture found that in France, Germany and Italy, Japan is subject to 'framings of otherness', albeit driven by different narratives and different priorities (Pellitteri 2016, 13). Pellitteri argues that in such images, Japan is 'more an imagined and fantasized place than a real one' (2016, 6), echoing Barthes' 'fictive nation'. When taken with the other literature discussed above, this reinforces the common Orientalist attitudes of Western countries towards Japan.

Conclusion

This chapter examined three main strands of literature: stereotyping, including that of Japan; Orientalism, and its application to Japan; and stereotyping and Orientalism in the media, in order to determine what extant literature could tell us about the puzzle of contradictory depictions of Japan's relationship with technology in the British press.

In the section on stereotyping, it was shown that many researchers consider stereotyping to be a form of categorisation (Allport 1954, Gilman 1985; McGarty 2002), a theory which McGarty expands by describing a set of interrelated cognitive processes for category formation: category use, perceived equivalence and background knowledge (2002, 18). For stereotyping specifically, McGarty proposes a taxonomy: stereotype, stereotypical depiction and stereotypical knowledge (2002). Under this taxonomy, stereotype refers to the set of relations, that is stereotypical depiction, stereotypical knowledge and perceived equivalence. Stereotypical depictions are the specific instantiations of this categorisation, and the stereotypical knowledge is what informs these (2002, pp. 19-23). Stereotypical depictions can be positive or negative, and groups can possess both positive and negative stereotypes, such as the elderly (Levy 2003) and the young (Hummert 1990), but the literature showed that these are applied at different times (Allport 1954, 196), whereas the puzzle present in this study is that the two depictions of Japan coexist.

With regard to the stereotyping of Japan specifically, Littlewood comes close to addressing contradictory stereotypical depictions, and even refers to the 'contradiction' (1996, 7), but again Littlewood is actually referring to contrasts: depictions that do not overlap, such as the depiction of the Japanese as polite and the depiction of the Japanese as warriors (Littlewood 1996, pp. 3-6). Matsumoto (2002), provides an interesting analysis of seven common stereotypical depictions, and makes the point that Japan is as much self-imagined by the Japanese, as it is by foreigners (2002, 2). Matsumoto's study is not immediately helpful, however, as he is primarily concerned with disproving these depictions, but does not examine how or why they persist, and nor does he consider contradictory depictions.

The next section looked at literature pertaining to Orientalism, which is a form of discourse that positions the West as superior to the East (Macfie 2000, pp. 1-3). The originator of the theory, Edward Said, argues that it serves to reinforce dominance and authority over the East (1978, 3). Its application to Japan has been called into

question, however, because Said did not explicitly look at Japan in his research, and Japan's experiences differ to other Asian countries (Iwabuchi 1994). In applying Orientalism to Japan, several variants have been developed, including Techno-Orientalism (Morley & Robins 1995), Self-Orientalism (Miller 1982) and Wacky Orientalism (Wagenaar 2016). Techno-Orientalism, is a discourse that positions Japan as technologically ahead of the West, but morally inferior, thus reinforcing Western superiority, much like in Saidian Orientalism (Lozano-Méndez 2010, 184). This discourse was particularly prevalent in the 1980s, when Japan was seen as an economic threat due to the power of its multinationals, but also served to fuel the imagination of writers and filmmakers, who used Tokyo and Japan as an imagined future (Lozano-Méndez 2010, 1988). Meanwhile, Self-Orientalism is an off-shoot of Orientalism in which Japan embraces its otherness and stereotypical depictions, using them to construct a national identity, set up in opposition to the West, which is individualistic and selfish (Iwabuchi 1994, n.p.). Lastly, Wacky Orientalism refers to the discourse by which Japanese weirdness is used to confirm the West's normalcy (Wagenaar 2016, 51), once again reinforcing the superiority of the West as in Saidian Orientalism. Of the four kinds of Orientalism presented, Techno-Orientalism appears the most relevant to the study of representations of technology in Japan, but it does not account for low-tech depictions. On the other hand, Saidian Orientalism would appear *prima facie* to account for this low-tech depiction, but not high-tech Japan.

The last strand of literature considered was stereotyping and Orientalism in the press. Both Fowler and Fürsich consider the news to be socially constructed, with the media determining which stories are newsworthy (Fowler 1991, 17; Fürsich 2010, 113). While Fowler includes economic factors in the selection of the news (1991, 17), Fürsich focusses entirely on ideology, suggesting that the Other is constructed in order to normalise a specific worldview (2010, 115). Multiple studies, including Fowler (1991), Fiske and Taylor (1991) and Sparks (2002) argue that stereotyping plays an important role in determining news depictions, and that the repetition of stereotypical depictions in the news media only reinforces them and makes them more prevalent (Fiske & Taylor 1991, 119; Fowler 1991, 17). Lasorsa and Dai's research (2007) suggests three additional reasons why stereotyping continues in the media, appealing to three different perspectives: a sociological perspective, a cultural perspective, and a psychological perspective, based on a literature review of media stereotyping (Lasorsa & Dai 2007, 281). Similarly, a study by Donsbach (2004) argues that news reporting is subjective as it is determined by the individual

perspectives of the journalists (Donsbach 2004, 136) or the beliefs and biases of the publication (Donsbach 2004, 134).

Studies on the reporting and representation of Japan in the news, show that news media often rely on stereotypical depictions of Japan (Dobson 2006; Hinton 2014; Zipangu 1998). This applies to British news reporting, too, where Japan is described in terms of 'ancient characterisations' (Hargreaves et al. 2001, 1). While Hargreaves, Inthorn and Speers (2001) and Hinton (2014) demonstrate that there are common stereotypical depictions of Japan, none of these account for the existence of contradictory depictions of Japan, in terms of technology or otherwise.

In spite of the wealth of literature available on stereotyping, Orientalism, and their particular manifestations in the press, both in general and with specific reference to Japan, existing research cannot adequately explain the coexistence of contradictory stereotypical depictions of technology in Japan. In broader terms, literature on stereotyping does not address contradictory stereotypical depictions existing concurrently, since it only accounts for positive and negative stereotypical depictions, which are used at different times (Czopp 2008; Hummert 1990; Kay et al. 2013). Thus, this study seeks to contribute to extant literature by building upon the knowledge and findings of previous research and filling the gap and puzzle that the case of Japan presents for typical approaches to stereotyping. The next chapter will describe how the study will go about achieving these aims, detailing the research strategy of the study, which utilises a multimodal approach in order to address the subsidiary questions, and ultimately come together in synthesis to solve the puzzle of contradictory stereotypical depictions of Japan's relationship with technology in the British press.

Chapter 3: Methodology

This study seeks to answer the research question: ‘to what extent are contradictory depictions of technology in Japan in the British press rooted in stereotyping, and how can they coexist?’ Through a review of extant literature on stereotyping, Orientalism, and their manifestations in the press, it was shown that the puzzle of contradictory depictions goes unresolved. It now falls to this chapter to set out how this study will resolve this puzzle and answer our research question, thus filling the gap in the literature.

At the same time, this chapter will set out the research methods that will be used to address the three subsidiary questions that were outlined in the introduction, these being:

- 1) To what extent are stereotypical depictions present in news articles about technology in Japan?
- 2) Are contradictory stereotypical depictions products of different stereotypical knowledge?
- 3) Are contradictory stereotypical depictions supported by evidence?

In order to tackle both the overarching question and the subsidiary questions, a research strategy is needed to lay down a step by step process, by which the different research methods employed in this thesis add value to the argument and build up a considered response to the research questions. According to Remenyi (2002, 39), it is the research strategy that will determine the overall direction of the study and the methods that will be used. The first step of the research strategy is to consider the choice of the case study. While this was briefly introduced in the introductory chapter (Chapter 1), here the selection procedure will be expanded upon to explain how Japan came to be chosen as the country of focus for this study, as well as the selection of the technologies chosen to represent contradictory depictions of Japan.

Japan as the Case

Japan was selected because previous studies have shown that the country is often characterised by stereotypical depictions, emphasising its difference to the UK (Hammond 1997; Hargreaves et al. 2001; Morris 2011). Due to its geographical remoteness to the UK, it is not a common tourist destination and thus knowledge

about the country is generally limited to knowledge received in content such as newspapers. In investigating a particular issue or phenomenon, case study research is a common approach allowing for a highly-focussed study of a defined number of examples. Indeed, in a study where a phenomenon must be studied through both documentary evidence as well as its 'real-life context' (Yin 1981, 98), case study research has been described by Yin (1981, 110) as a 'serious' research strategy.

A case study-based approach has been chosen for this research, because it allows for researchers to focus on a specific, real world issue (Gillham 2005). Before expanding the description of the cases chosen for this thesis, it is worth briefly considering what exactly a case study is and how the approach differs from other forms of research. First of all, it is worth asking, what is a 'case'? According to Ragin & Becker (1992) there is little consensus on what a case actually is, and is thus used broadly. Babbie, however, comes close to offering some explanation in his definition of a case study as that which 'focuses attention on a single instance of some social phenomenon, such as a village, a family, or a juvenile gang' (2013, 338). Regardless of what the phenomenon is, in this case the stereotyping of technology in Japan, the 'essential characteristic' of case study research is the 'limitation of attention to a particular instance of something' (2013, 338). Gillham (2005, 1) builds upon this with the addition that a case can only be studied or understood in context, as it is embedded in the real world.

Thus, case study research can be seen as a highly focussed form of research, as only that single phenomenon is of interest. On the other hand, case study research is also broad in its potential reach, for it draws on a range of different sorts of evidence in order to find answers to the research question about the particular phenomenon (Gillham 2005, pp. 1f). While in this instance Japan is technically the case study, in order to study stereotypical depictions of Japan in the news it is necessary to provide examples of these.

Within the scope of this thesis, it would not have been possible to look at every news article about Japan in the British press, and so the study focusses on a specific news theme. Technology stories were chosen because of their high degree of frequency in the press, indicating strong associations between technology and Japan (Hargreaves et al. 2001, 24). As seen in the introductory chapter, what is surprising within news reporting of technology, is that it is possible to observe contradictory depictions of technology in Japan. Depictions of Japan are usually limited to contrasting aspects about the country, such as traditional versus modern (as seen in the literature

review), which do not directly conflict, whereas the depictions of Japan as low-tech and high-tech do. This presents a particular puzzle, which cannot be explained by extant literature, since previous studies have considered contrasting depictions of Japan (Littlewood 1996), rather than contradictions.

Despite being just one area of news, technology articles cover a wide variety of different stories, from consumer electronics, to industry, to software and services. For this study, two example technologies were chosen, each addressing a different depiction of Japan's relationship with technology: one technology which shows Japan to be low-tech, and one technology which shows Japan to be high-tech. The next section will expand upon the design of the case study, providing a detailed justification for the chosen example technologies over other alternatives.

In designing research around case studies, choosing a number of cases is important: it is possible to study a single case, a small number of cases (small-N) or a large number of cases (large-N). This thesis has chosen to focus on one case: the case of Japan, with a specific focus on the reporting of technology by the British press. However, within this case, in order to investigate the puzzle of contradictory depictions, it is necessary to take examples of each side of the dichotomy: example of depictions of low-tech Japan, and examples of depictions of high-tech Japan. While these are not cases per-se, the selection and study of the two examples have been treated as sub-cases, within the main case, Japan. These cases are what is known as most-dissimilar cases, i.e. they are as different as possible (the opposing depictions of Japan) except on one variable (the stereotyping of Japan). They are one case-study selection strategy within the comparative method developed by Sartori (Collier & Gerring 2009; Sartori 1970), based on Mill's principles of inductive reasoning (Mill 1843, reprinted 2002), along with the most-similar case method, in which the cases are similar except on one variable. Since this thesis is addressing the puzzle of contradictory depictions of Japan, the most-dissimilar case approach is more relevant here. This thesis is thus a small-N case study, which has the advantage of allowing for rich, detailed analysis within a well-defined scope, due to the narrow focus of the study (Bennett 2004, 44).

In the purposive selection of cases, cases are necessarily omitted from discussion, which could be seen as bias. Why has Japan been taken as a case, and not another country? The two examples of technologies that have been chosen as sub-cases for this research are very different, and it is in part for this difference that they have been selected. In spite of their differences, however, in their treatment of Japan, it is

expected that in articles for both example technologies, articles will appeal to stereotypical knowledge and apply stereotypical depictions of Japan, and it is on this variable that these two sub-cases will be tested.

Another criticism often levelled at case study research is the choice of small-N studies (small number of cases) over large-N (large number of cases). Bennett (2004, 44) explains that while a small-N approach does result in detailed studies, it does not allow for broader generalisations to be made. However, he suggests that small-N studies can resist criticism so long as they also make 'comparisons to existing research in the same research program so that the field as a whole incrementally fills out the typological space' (2004, pp. 44f).

The surveying of extant literature to inform one's own study is an important part of the naturalistic case study approach, which utilises inductive theorising (Gillham 2005, pp. 6f). The first stage for the naturalistic researcher is to understand the context in which the research sits. The literature review has already positioned this thesis within the broader academic context of the stereotyping of Japan in the media, and it is on these established findings that the case study is based. The alternative to this approach is the positivist model of case study research, which relies on deductive reasoning, through the use of a 'predetermined procedure of investigation' (2005, 6). As the literature found, however, current approaches to press stereotyping and Orientalising of Japan do not adequately address the puzzle of contradictory stereotypical depictions in the British press. As such, an alternative methodological approach must be devised, along the naturalistic model of case study research.

Case study research is often considered a method in its own right, though it is better described as a multimodal approach, as it incorporates a number of different methods, which are used in tandem to explore a particular issue. According to Stake, case study research differentiates itself from other research in that the selection is often purposive; the cases that have been chosen because there is a need for understanding (1995, 4). The kinds of methods at the disposal of the case study researcher are by and large qualitative, though quantitative data is also useful in building up evidence and seeking understanding. While quantitative methods are important for yielding usable data, they are of less importance to small-N case studies, particularly case studies following the naturalistic approach, which focusses on context and meaning, whereas large-N and positivist case studies rely on quantitative data a lot more for the purposes of generalisation (Gillham 2005, 8).

The purpose of this study is to see to what extent stereotyping can explain the coexistence and persistence of contradictory depictions of technology in Japan in the British press. However, it is first necessary to establish that these stereotypical attitudes are indeed present, and what form they take. As the literature review (Chapter 2) showed, stereotypical depictions of Japan are often framed within the context of Orientalism (Said 1978), and its derivative forms, such as Techno-Orientalism (Morley & Robins 1995), Self-Orientalism (Iwabuchi 1994), and to a lesser extent, Wacky Orientalism (Wagenaar 2016).

In designing the case study, a visual scale was designed in order to illustrate the puzzle of contradictory depictions, whereby Japan is at times presented as being low-tech, while at others it is shown to be high-tech. Figure 3.1 (below) shows the scale, which plots the depicted level of technology in the press on the upper line, whilst below the degree to which these depictions are Orientalised is shown. The puzzle is that Japan can be found at both ends of this spectrum, occupying different depicted levels of technology: at times low-tech, while at others high-tech. The gradient scale below this shows the degree of Orientalising expected in these particular depictions, based on the literature about Orientalism and stereotyping. According to this literature, as seen in the literature review (Chapter 2), both stereotyping and Orientalism essentialise the object group, leading to exaggeration: Saidian Orientalism fixes Japan in the past, whereas Techno-Orientalism fixes Japan in the future. Since the labels of what is low-tech and what is high-tech are determined by the journalists, this thesis argues that the middle point of both scales represents the in-group of the journalists, in this case the UK. Put another way, the centre point of the visual scale represents what is considered the norm of the observer (the journalist), and any uses of technology perceived as being outside of this norm are thus subjected to Orientalism, emphasising its deviance from what is perceived as normal.

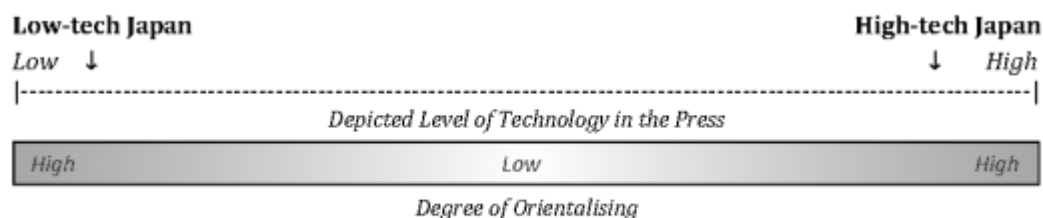


Figure 3.1 Scale of Depicted Level of Technology in the Press and the Degree of Orientalising of Japan in Depictions of this Technology Use

In the example technologies chosen for analysis, Japan is never depicted as being in the middle, only as an extreme, be it at the low-tech end, or the high-tech end. These cases are what is known as most-dissimilar cases (Mill 1843; Sartori 1970), i.e. they are as different as possible (the opposing depictions of Japan) except on one variable (their appeal to stereotypical knowledge about Japan). Since this thesis is addressing the puzzle of contradictory depictions of Japan, the most-dissimilar case approach is more relevant here than the most-similar case.

For the first example technology, a topic representing low-tech Japan was chosen, namely Japan's apparent attachment to fax machines. This particular topic was chosen because it has been repeated over the course of five years in a number of publications, and has also been referenced in other news articles (e.g. Millward 2016, *Financial Times* 2017), indicating its reach and recognition as an idea held about Japan. Other, similar stories were also considered, including Japan's use of various physical media (such as cassettes, CDs, and the continued presence of video rental shops, which no longer exist in many countries), but these were rejected since they were featured in very few news sources (e.g. Fitzpatrick 2010; 2015) and were thus unlikely to have much impact on the wider narrative of technological Japan.

Likewise, the second example technology, a topic representing high-tech Japan, was chosen for its high frequency of repetition: robots in Japan. Robots have played a large role in Japanese popular culture since the fifties, beginning with Osamu Tezuka's *Tetsuwan Atomu*, known in English as *Astroboy* (*The Japan Times* 2014). Robots represent the most advanced technology, particularly in the form of anthropomorphised robots with artificial intelligence (AI), with which this study is concerned. Robots have had an association with Japan for decades, in both science fiction and in Western discussion about Japan. Much has already been written on robots in Japan, including their depiction in Western media, so this example focusses only on robots featured in news articles within the timeframe established for the sampling, 2000-2015. This will be explained further in the section on sampling, later in the chapter.

Literature on stereotyping and Orientalism (or indeed Techno-Orientalism) would suggest these are heavily involved in the construction of these two very different Japans (Hammond 1997; 1999). The study will corroborate this finding and go further, showing how the same processes of Othering and generalising in stereotyping and Orientalism can lead to very different depictions, as well as positing an explanation for these discrepancies. Figure 3.1 reflects this, with a scale showing

the depicted level of technology in Japan and the extent to which these depictions are expected to be Orientalised. As the literature review explained, Orientalism seeks to create a division between the West and the East (Said 1978), and this division can be seen even in the positioning of Japan on this scale: the East is aberrant, be it at one extreme or the other. As Said explains, however, such distinctions are social constructs and many differences are equally constructed (1978).

Having now established that the thesis will employ a case study design, with Japan as the case and the two example technologies as sub-cases, representing most-dissimilar cases, the next step of the research strategy is to consider which methods are best suited to addressing the subsidiary questions. As part of a comprehensive research strategy, these methods will work together to address different subsidiary questions and thus different aspects of the overarching research question, the results of which can then be drawn together through continuous triangulation in order to obtain a cohesive answer to the research question.

Selection of Methods for the Case Study

As explained at the beginning of this chapter, case study research as an approach employs a number of different methods. Gilham (2005) and Stake (1995) provide a list of typical methods utilised in case study research, consisting of principally 'observation, interview, and document review' (Stake 1995, 114). The advantage of a multimodal approach is that some methods are more suited to obtaining different kinds of data and solving different problems. The three subsidiary questions could not be answered using a single method, and thus require different methodological approaches, which will work together as part of a strategy for addressing the overarching research question.

To what extent are stereotypical depictions present in news articles about technology in Japan?

Beginning with the first subsidiary question, in order to find the extent to which stereotypical depictions are present in news articles, it is necessary to analyse news articles themselves. For this reason, the method of document review will be used. Document review refers to the analysis of texts, in whatever form that they take (depending on the nature of the case study, they could be government policy documents, white papers, company health and safety guidelines, or in this instance,

news articles). Document review does not denote a particular approach to analysis and so various textual analysis methodologies had to be considered. These will be discussed in the sections on document review, which consider the sampling of articles for analysis, before looking at the different methods available to researchers. Document review will be applied to each example technology individually, with Chapter 4 covering the low-tech Japan example, and Chapter 5 looking at high-tech Japan.

Are contradictory stereotypical depictions products of different stereotypical knowledge?

Next in Chapter 6, in order to address the second subsidiary question, it will be necessary to draw together the findings of Chapters 4 and 5, and compare the depictions. The second question asks whether contradictory stereotypical depictions are products of different stereotypical knowledge, and here the results of the document review will be analysed through the critical lenses of stereotyping and Orientalism. Here, the chapter will bring in the literatures on stereotyping and Orientalism discussed in the previous chapter, making heavy use of McGarty's (2002) distinctions between the stereotype, stereotypical knowledge and stereotypical depictions.

Are contradictory stereotypical depictions supported by evidence?

According to McGarty (2002), while stereotypes are difficult to change, stereotypical depictions can change over time and through experience. This ties into the third subsidiary question: are contradictory stereotypical depictions supported by evidence? In order to analyse evidence of these depictions, the study must bring in the 'real-life context' described by Yin (1981, 98), meaning that empirical evidence of the use of these technologies must be gathered. Thus, two further methods have been incorporated into the case study research strategy: observation and interview.

As the section on observation will explain, there are different types of observations that can be carried out, with different purposes, yielding different kinds of data. Here it is worth briefly defining the two main forms of observation: participant and detached observation. Participant observation is a strategy whereby the researcher becomes involved within the group they are researching and makes observations over a period of time (Gillham 2005, pp. 46-48). Gillham provides the example of a

researcher investigating the value of having artists visit hospitals to work with elderly patients, the observation of which involved the researcher directly observing the art sessions (2005, 50). Detached observation, meanwhile, involves observing from the outside for a specific time frame, looking for a specific behaviour or measuring/counting something specific (2005, pp. 46-55). Both have their advantages, and the researcher does not have to choose between one or the other and can use both (2005, 46).

Interviews are an important part of case study research, and are considered more valuable than questionnaires, which are quantitative data sources (Gillham 2005, 59). As the section on interviews will explain, there are different kinds of interview: unstructured, semi-structured and structured interviews being among the main types (Dawson 2009, 27). Unstructured interviews, sometimes called in-depth interviews, seek to understand the interviewee and their background, so the interviewer asks as few questions as possible, in order to allow the interviewee to talk about what they think is important (Dawson 2009, pp. 27f). Semi-structured interviews are used when the researcher is looking for specific information and wants to compare the answers between multiple sets of interviewees by using the same set of questions (2009, 28). The interview is 'semi' structured because the interviewer can ask questions that are not on the list if particular information comes up in the interview (2009, 28). Lastly, structured interviews are rigidly-structured and are most often used in market research in order to obtain quantitative data (2009, 29).

Triangulation

These three methods have been chosen to approach the three subsidiary questions proposed in Chapter 1. Stake (1995, pp. 107-114) argues that the operationalisation of the methods available to the case study researcher can be used to find an answer through the process of triangulation. The term triangulation was coined by Newby (1977, 123) and has become widely accepted by researchers (Baker 2006, 16; McNeill 1990, 22), due to its advantages. It refers to a multimodal approach in which different methods are used to tackle the same research problem (here the puzzle of contradictory depictions) from different aspects (the subsidiary questions). By not relying on one method, a case study forms a research strategy that allows for the different findings of these methods to be drawn together, triangulating a more accurate answer to the research problem. Triangulation, it is argued, facilitates

validity check hypotheses; anchors findings in ‘more robust interpretations and explanations’; and allows researchers to respond to any problems with their research (Layder 1993, 128).

Having established the subsidiary questions and given an overview of the multimodal research strategy that will be used to answer them, it is now time to look at each method in turn. This will begin with the first method of case study research, document review. While each method is of equal importance to the study, due to the need to describe the assembly of the corpus of texts which are to be analysed, as well as the mode of analysis itself, document review requires a longer explanation and has thus been broken down into two parts: the first describing how the article samples were gathered for each case; while the second part describes the methods used to analyse these articles.

Document Review I: Assembling Corpora

As the section above explained, case study methodology is often multimodal, combining three discrete methods: document review, observation and interview (Stake 1995, 114). These methods have been selected as part of a strategy to address the three subsidiary questions which will go towards answering the overarching research question. This section and the next focus on the first of these methods: document review. This section will detail how the sources were chosen, the choice of date range, and how the articles were actually gathered. The next section will then describe the various methods of textual analysis available to the researcher, including content analysis, which has been used by previous researchers with a quantitative focus (Berelson 1952), before introducing critical discourse analysis, which has been chosen for this study.

In order to address the first subsidiary question, ‘to what extent are stereotypical depictions present in news articles about technology in Japan?’, it is necessary to obtain news articles from which to analyse stereotypical depictions. Previous studies have focussed on the representation of Japan in the foreign media, including news in the UK (Hargreaves et al. 2001; Hammond 1997), Germany (Breger 1990), France (Drifte 1994) and the US (Hammond 1997). These studies have made use of content analysis to identify common key words and key associations that are linked to Japan. The various essays that make up Hammond’s (Ed.) *Cultural Difference, Media Memories: Anglo-American Images of Japan* (1997) make several interesting

observations about the kinds of news about Japan that is reported upon, and the way in which it is reported. In the past, when Japan was seen as the enemy, if Japan were to upset 'world order', it would have been framed as a concern for 'white prestige', whereas these days it is a problem of 'cultural difference' (Hammond 1997, xv). The kinds of stories written about Japan tend to emphasise this difference, often being 'strange but true' or 'weird' (1997, 87). 'Culture' is a common explanation employed by journalists in articles, rather than appealing to history or even rational explanations (1997, pp. 5-17). For example, an article about the Japanese reaction to the Kobe earthquake linked the 'stoic' attitude of the Japanese to the Shinto religion, suggesting that 'the world's most technologically-advanced society has to be understood in terms of the pantheism of ancient peasant communities' (1997, 102).

For this thesis, in order to investigate the two opposing depictions of Japan, represented by the two example technologies, news articles on these technologies needed to be gathered together for each technology. As the research requires articles about two specific technologies, the author cannot appeal to previous studies carried out into the representation of Japan, as these give a far broader overview. In compiling the articles for the case studies, there were a number of factors to consider: what news sources should be included, what search terms should be used, what date range to use, and what method of analysis to use on this assembled data.

For the purposes of this research, sources were limited to British news publications only and the number of sources capped at ten. At the time of the sampling, of the ten chosen publications, an English-language Japanese newspaper was selected as a control source in order to see what, if any, differences there are in the ways Japan is depicted by different news sources targeting different groups. An English-language Japanese newspaper was chosen over a Japanese-language publication, because the intention was to analyse content intended for a non-Japanese audience, but written by Japanese nationals, to see if there was evidence of Self-Orientalism. *The Japan Times* was chosen over other English-language Japanese newspapers, such as *The Japan News* as it boasts the highest print circulation of all domestic English-language newspapers in Japan (World Eye Reports 2014), with a daily circulation of 43,965 (*The Japan Times* 2017). Ultimately, however, the data obtained from the analysis of *The Japan Times* did not contribute to the solving of the specific puzzle of contradictory depictions of Japan in British news, because as a specialist publication, it is unlikely to have a significant British readership, and so was omitted from the thesis.

As a result, only nine publications were included in the final study, representing some of the most read news publications in the UK, as ranked by National Readership Survey (NRS), which ranks the top news publications in the UK by readership, both online and offline (Press Gazette 2016). To reflect changing news consumption habits and the increasing preference for online news, both on PC and on mobile devices, the below table (Table 3.1) aggregates the results of the NRS with statistics from SimilarWeb, a website which tracks website traffic and hosts a ranking for the most visited news websites in the UK (SimilarWeb 2016). As can be seen in Table 3.1, some of these websites in the web ranking are not British in origin, being either American or foreign language publications (such as *Wirtualna Polska*, *Onet* and *CNET*), while others are news aggregator sites (such as *MSN* and *Newsnow*). *Sky Sports* has also been excluded, since as a sports news site, it is unlikely to feature technology news.

Web Rank	Print Rank	Publication	2015 Website Views	2015 Print Readership
1	N/A	<i>BBC News</i>	18,626,000,000	N/A
2	N/A	<i>MSN</i>	5,644,000,000	N/A
3	1	<i>Daily Mail</i>	3,676,000,000	10,515,000
4	4	<i>The Guardian</i>	2,121,000,000	3,739,000
5	5	<i>The Telegraph</i>	1,932,000,000	3,798,000
6	N/A	<i>Wirtualna Polska</i>	1,566,000,000	N/A
7	N/A	<i>Onet</i>	1,361,000,000	N/A
8	N/A	<i>Sky Sports</i>	1,320,000,000	N/A
9	N/A	<i>Newsnow</i>	1,293,000,000	N/A
10	3	<i>The Daily Mirror</i>	1,028,000,000	6,630,000
11	N/A	<i>Buzzfeed</i>	955,000,000	N/A
12	6	<i>The Independent</i>	735,000,000	2,120,000
13	N/A	<i>IB Times</i>	491,000,000	N/A
14	N/A	<i>Yahoo News</i>	469,000,000	N/A
15	N/A	<i>CNET</i>	448,000,000	N/A
16	N/A	<i>Delfi</i>	399,000,000	N/A
17	2	<i>The Metro</i>	398,000,000	10,354,000
18	N/A	<i>Sky News</i>	397,000,000	N/A
19	N/A	<i>The Lad Bible</i>	382,000,000	N/A
20	N/A	<i>ABV</i>	374,000,000	N/A

Table 3.1 List of Top 20 UK News Websites in 2015 According to SimilarWeb (2016) and Corresponding Print Readership Based on the NRS up to March 2015 (Press Gazette 2015).

Analysing articles from a range of sources—print newspapers, the websites of print newspapers, and online-only news websites—affords the advantage of being able to represent the diverse ways in which text-based news is consumed today. Moreover, each of these sources has a different readership, with different demographics

preferring certain sources over others, and individual sources have their own political leanings, too. Within print newspapers there are also further differences, between the tabloid newspapers and the broadsheet newspapers. Baker (2010) makes the following distinctions:

- Tabloid, also called a popular newspaper: small size, short headlines, sometimes use puns, focus on celebrity gossip
- Broadsheet, also called a quality newspaper: larger, with a focus on political news (national and international), sophisticated style of writing

(Baker 2010, 315)

A further distinction often made is that of demographics, with ‘working-class people reading tabloids and the middle-classes reading broadsheets’ (Baker 2010, 316). Newspapers’ classification as tabloid or broadsheet has been given in Table 3.2, below, as well as the additional category of ‘mid-market’ tabloid newspaper, which sits somewhere between the two (Connell 1998, 15).

Publication	Type	Political Bias	Average Age of Readership
<i>Daily Mail</i>	mid-market tabloid	right-wing	58
<i>Daily Mirror</i>	popular tabloid	left-wing	51
<i>The Telegraph</i>	quality broadsheet	right-wing	61
<i>The Guardian</i>	quality Berliner	left-wing	44
<i>The Independent</i> (online only since 2016)	(formerly) quality compact	centre/left-of-centre	43
<i>The Metro</i>	mid-market tabloid	neutral ⁸	37

Table 3.2 Newspaper Types, Political Leanings & Readership (Magforum 2018; Newsworks 2018; Ponsford 2017; Taylor 2017; Smith 2017)

⁸ According to Mance and Bond, writing for *The Financial Times*, *The Metro* has ‘no leading articles, opinion pieces or even a reporter based at Westminster’ and as such adopts a uniquely nonpartisan approach (Mance & Bond 2017).

As the table above shows, the difference is not as simple as a matter of size. While the terms ‘tabloid’ and ‘broadsheet’ technically refer to the size of the newspaper page itself, they have come to be associated with the quality of the journalism within, and some ‘broadsheet’ newspapers are now actually printed the same size as tabloid newspapers (Bednarek and Caple 2012). This can be seen in the ‘quality’ newspapers, of which only *The Daily Telegraph* is a broadsheet (Magforum 2018), whilst *The Guardian* is a Berliner format paper, which is slightly larger than a tabloid (2018), and *The Independent* has since ceased print production entirely (Sweney 2016). This table also shows the political leanings of the newspapers (Mance & Bond 2017; Smith 2017), as well as the average age of the readership (Ponsford 2017; Taylor 2017), which differ greatly across the selected publications. This data could not be found for online-only news sources, although *BBC News* claims to be politically neutral as part of the public service broadcaster, BBC (BBC 2018). By choosing such a broad range of publications, the study is able to produce a comprehensive and representative analysis of British news depictions of Japan.

For the first example technology, fax machines, it is anticipated that there will be fewer articles obtained in the sampling than for the second example technology, for a number of reasons. Firstly, in the case of fax machine-related articles, because the story is highly specific, news sources are likely to have written a dedicated one on the subject once, unlike robots, which is a developing field of technology, and therefore there are always new advancements that can be reported on. Secondly, for articles about fax machines in Japan to depict the country as low-tech, the technology must be perceived as low-tech in the journalist’s/publication’s country. According to Coopersmith, although fax’s overall importance diminished after 2000 (Coopersmith 2015, 183) and the technology is arguably ‘dead’ (Coopersmith 2010, 178), fax machines continued to be used into the first decade of the millennium, with machines readily available for purchase in the United States, and faxing services available from a number of companies (2010, 177).

Thus, while the first article to specifically describe Japan as low-tech for using fax machines did not appear until 2012 (*BBC News* 2012), in order to provide broader contextualisation, all articles containing the keywords ‘fax’ and ‘Japan’ that have appeared in the above publications since 2000 up until the end of 2015 have been compiled. By doing so, it is possible to examine the change in narrative and see how perceptions towards faxing have changed in this fifteen-year period.

In the case of robots, the same timeframe has been used, though unlike the fax machine example, robots are a frequent topic for Japan-related reporting (Hargreaves et al. 2001, 24) so there are far more articles available. The exact sample sizes and a breakdown thereof will be provided in the individual technology chapters. Choosing 2000 as a starting point was justified based on previous studies of media representation of Japan in the British press, first in 1991 (Douglas 1991) and again in 2001 (Hargreaves et al. 2001). Up until 2016, no study has since addressed British media representation of Japan, with the exception of Hinton's articles on specific media stereotypical depictions (Hinton 2014; 2015; see literature review, Chapter 2).

Once the parameters were set, searches were carried out on the LexisNexis database, which archives print and online editions of many newspapers. In cases where this database did not have the particular news source, searches were carried out on the source's own website, or using a Google domain search, which limits the search to pages on a specific website. The keywords established above were searched using Boolean operators, in particular the asterisk operator (*), which allows for the inclusion of variants of the base term ('faxing' and 'faxes' would thus be included in the results of a search for 'fax*'). The resultant articles were then assembled together, ready for analysis. The outcomes of the article searches will be presented in their relevant case study chapters, as before they can be considered, the method of analysis must first be clarified.

Document Review II: Analyses of Corpora

When it comes to analysing texts, there are multiple methods available to researchers. According to Frey et al. (1999), textual analysis is a form of analysis used by researchers to describe and interpret the content, structure and functions of the messages within a text. Content analysis is chiefly a quantitative research method, defined as a systematic, step-by-step procedure for describing communication, be it written, spoken or visual (Frey et al. 1999; Berelson 1952; Weber 1990). Content analysis is a method that allows researchers to look at large volumes of texts, reducing them down to content categories by way of coding. What this means is that texts are scanned for their use of certain keywords and other data. Content analysis is not simply the counting of the frequency of certain words or phrases—though this does form a part of the methodology—but it is its systematic coding and categorising of data that makes it meaningful. Weber defined these categories as groups of 'words with similar meaning or connotations' (1990, 37), but they must be highly rigorous,

as categories must be mutually exclusive, allowing for no overlap; and must be able to represent all the data obtained.

For the analysis of news material, content analysis is a very common tool used by researchers. However, it is a tool most often, and most appropriately used, when dealing with a large body of texts. That is, it is a method best suited to the analysis of a large corpus. The strength of content analysis lies not only in its ability to deal with large swathes of data, but also in that the techniques are directly replicable, as it reduces texts down into data through explicit coding. On the other hand, by reducing these texts to data such as frequencies, content analysis is purely descriptive in its methods, and is thus unable to account for motives. In other words, while it can be used to say 'this happens', it cannot tell us 'why'. In terms of this research, then, content analysis is not sufficient by itself in addressing the research question. Previous research has shown that stereotyping is present in news articles, as shown by the literature review, but no studies have explained why. Consequently, other methods are required in order to move beyond the simple descriptive 'what' of the study. Baldry (2000) provides a good justification for other forms of analysis over corpus-based analysis in that it treats language as a 'self-contained object' (Baker 2006, 7), 'abstracting text from its context' (Baldry 2000, 36). This study is not interested purely in the existence of such stereotyping, but also how contradictory depictions can coexist, and why they persist in the face of evidence to the contrary. This requires looking beyond the texts themselves, and to the wider contexts of their production: the discourses into which they fit, their authorship and audience.

As a study of discourse, it is useful to define what exactly this term means. As with many other words used in this study (such as context, robot, stereotype, etc.) it is one frequently employed in various academic disciplines, as well as in everyday speech, and thus can be understood differently in different situations. While a preliminary definition was given in the Chapter 1, a more detailed definition is required in order to better understand the tenets of discourse analysis. Baker (2006) describes two common understandings of discourse: (i) 'language above the sentence or above the clause (2006, 3, quoting Stubbs 1983, 1); and (ii) as 'language in use' (2006, 3, quoting Brown and Yule 1983, 3). Baker ultimately takes the Foucauldian understanding of discourse, and many critical discourse analysts have founded their approaches in Foucault's work. The definition Foucault provides for discourse is 'practices which systematically form the objects of which they speak' (1972, 49).

Unlike content analysis, discourse analysis is a qualitative research method, which is less concerned with the instances of specific words (though this is still important), and instead is more interested in the discourse (or discourses) running through the texts. Discourse analysis sets itself apart from content analysis as it is not interested in texts as data. Discourse analysts can be seen as having a vested interest in their subject, as they see discourses as not being neutral reflections of the world (Jørgensen & Phillips 2002, pp. 1-3). Fairclough goes further than this and argues that all his discourse analysis is politically or socially motivated, in order to effect some kind of change (Fairclough & Wodak 2009, pp. 258-284).

In terms of methods, according to van Dijk, discourse analysis sets itself apart from other methods of textual analysis in its attention to structures. These can be 'structures of expression (sounds, image, movement, etc., including those of words, word order or sentence structure), on the one hand, and structures of meaning and (inter)action, on the other' (van Dijk n.d., n.p.). In contrast to content analysis, not only is what is said important, but also *how* it is said. Moreover, the absence of text can also be a source of information for the discourse analyst: what is not being said? Are there unstated assumptions being made?

Discourse analysis has been chosen over content analysis for this study since content analysis demands a large corpus for analysis. This is particularly true for the first example technology, since beyond an initial article about the phenomenon of fax machines still being popular in Japan, it is unlikely a publication will write further articles on the same topic as there is nothing further to report. There are exceptions, however, as in articles about low-tech Japan, newspapers have occasionally introduced further 'backwards' technologies, building upon this already established image of fax-loving Japan. Consequently, content analysis would not be suitable as there are far too few articles to generate sufficient data for a quantitative study. Instead, a qualitative approach, which focusses on an in-depth analysis of a small range of sources, was deemed more appropriate for this study.

As noted by Diaz-Bone, Bührmann, Gutiérrez Rodríguez, Schneider, Kendall and Tirado (Diaz-Bone et al. 2007), many forms of discourse analysis have been developed since Foucault's work on discourse. Among the most well-established forms of discourse analysis, are conversation analysis (CA), which is the study of natural talk, and is thus concerned with turn-taking and sequential interaction (Hutchy & Wooffit 1994, 14), Goffman's approach to discourse as ritual, which focusses on the 'structure of experience individuals have at any moment of their

social lives' (Goffman 1974, 13), and Gumperz's approach to discourse as situated practice, which sees discourse as a culturally-determined practice (1982). These forms of discourse analysis are not relevant for this particular study, since both CA and Gumperz's discourse analysis are focussed on spoken text, whilst Goffman's approach is focussed on the individual, whereas news texts are part of a broader discourse.

Different forms of discourse analysis have become popular in different countries, such as in France where the field has a 'Marxist dominance' (Diaz-Bone et al. 2007, n.p.), or in Germany where researchers have focussed on the 'societal functions' of discourse (2007, n.p.). In the United Kingdom, Norman Fairclough is among the most well-known of researchers in discourse analysis, and British research has tended to focus on 'relations of power and representation', and has emerged as critical discourse analysis (2007, n.p.).

Having surveyed the kinds of discourse analysis available, this study has selected the theory and method of critical discourse analysis (CDA), which as with other forms of discourse analysis has its roots in Foucauldian thought (Fairclough 2003, 2). One distinction between CDA and other forms of analysis, such as content analysis, is its focus on a social problem or issue; that is, it is problem-oriented (van Dijk 2009, 111). Whilst content analysis is primarily concerned with analysis of the text itself and demonstrating that such problems exist, CDA distinguishes itself by examining *how* such problems are reproduced via text and talk (2009, 111). As this thesis is a study about the representation of Japan in the press, which the literature review has shown to be heavily stereotyped, CDA is the most appropriate method available.

CDA is also designed to be used in conjunction with other methods, including content analysis. Indeed, prominent critical discourse analysts such as Fairclough (2003) and van Dijk (2009) have incorporated content analysis methods into their methodological frameworks. While several approaches to CDA exist, one of the most popular has been developed by Fairclough, and is often considered the most comprehensive methodology (Janks 1997). Van Dijk is another prominent critical discourse analyst, but his framework is not as comprehensive as Fairclough's. For this reason, his approaches to CDA will be integrated into Fairclough's framework, incorporating van Dijk's particular emphasis on the 'Other', as will be discussed later.

For the critical discourse analyst, the text is only one aspect of focus, as it must be considered in context. However, as van Dijk describes, the word 'context' is difficult

to define, as it is understood differently within different disciplines; it is particularly ambiguous within language and discourse study where it can simultaneously hold two definitions: (i) as verbal context, where it refers to the other words or sentences immediately surrounding a word or phrase, and (ii) the social situation in which the language is being used (van Dijk 2009, 2). It is this second definition that is of particular relevance to CDA, and the one that van Dijk takes for his object of analysis, defining it as ‘the relevant environment of language use’ (2009, 3), which influences both the production and subsequent understanding of the discourse (2009, 4).

Fairclough attempts to unite three traditions of analysis, namely: the detailed textual analysis of Halliday (Halliday 1993), Foucault’s theory (Foucault 1972), and micro-sociological analysis of social practice, wherein ‘everyday life is treated as the product of people’s actions in which they follow a set of shared “common-sense” rules and procedures’ (Phillips & Jørgensen 2002, pp. 65f). For Fairclough, language is an ‘irreducible part of social life’ (Fairclough 2003, 3) and as such an analysis of discourse is a highly useful analytical strategy in social research. He goes further, stating that texts have the power to bring about changes—changes in our knowledge, our beliefs and our attitudes (2003, 8). Texts, including news articles, can shape thoughts and are thus essentially political in nature. If language is taken to be a series of linguistic choices, then every word or phrase employed by a writer is chosen from a number of possibilities, be this the use of one word over a synonym or the use of active or passive voice (Machin & Mayr 2012, 32). This choice, be it conscious or not, is indicative of the viewpoint of the writer (in this case, the journalist) and the message they wish to propagate. Indeed, one of the most basic methods of CDA is lexical analysis, in which the analyst asks: what vocabulary does the writer use? Does the writer tend to use certain kinds of words over others? (2012, 30)

According to CDA, discourse is often concerned with promoting or sustaining a certain ideology. Fairclough argues that discourse should be seen as an exercise of power relations (Machine & Mayr 2012, 5), for every use of language contributes towards an ideology, which represents and goes towards constructing society, which he associates with ‘unequal relations of power, relations of domination and exploitation’ (Fairclough & Wodak 2009, 275). In the Saidian tradition, Orientalism is also an exercise of power, designed to position the West as superior to the East, through representations of the West as powerful and civilised and the East as weak and barbaric. While it differentiates from traditional Orientalism, Techno-Orientalism is also used in this way, as a legitimation for the distrust and

patronisation of Japan: the country is not trusted because its corporations' economic strategies are considered stealthy and undermine Western principles (Morley & Robins 1995, pp. 152f), but is also patronised for its capitalism-gone-wrong 'pointless consumerism' (Lozano-Méndez 2010, 190). Operationalising stereotyping and Orientalising within this case study requires an analytical framework and while CDA has been applied in a number of different ways, Fairclough is one of the only CDA researchers to provide an analytical framework for others to follow. Fairclough conceptualises the analysis of a text as a 'three dimensional model' (Fairclough 1992), shown below in Figure 3.2, below.

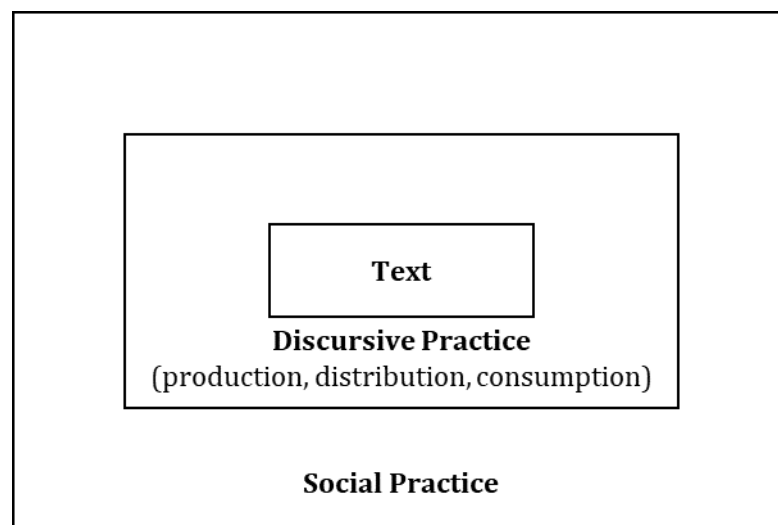


Figure 3.2 Fairclough's Three-Dimension Model for Analysis (Fairclough 1992, 73)

The three dimensions of critical discourse are thus:

- (i) The linguistic features of the text
- (ii) The discursive practice of the text, i.e. the production and consumption of the text
- (iii) Social practice, i.e. the wider social practice in which the text belongs

According to Phillips & Jørgensen, the model provides an analytical framework for discourse analysis based on the principle that texts cannot be understood or analysed in isolation (Phillips & Jørgensen 2002, 70). Rather, texts are part of a larger social practice, the 'irreducible part of social life' to which Fairclough referred. This being the case, the discursive contexts in which they are produced must be considered: who is writing them, who is their audience? These texts also exist within wider discourses and are informed by previous texts and so must be considered in relation to other texts and the social context in which they are produced. Below, the ways in which these three dimensions will be addressed will be set out.

The first dimension, linguistic features, involves an analysis of the texts themselves. A lexical analysis will be employed, examining the choice of words used, as well as the larger discourses of which they form a part. According to Halliday, on whose work Fairclough bases his approach to textual analysis, words are part of a 'network of meanings' (Fairclough 1978; 1985; quoted in Machin & Mayr 2012, 39). Thus, one cannot consider a word on its own, but also the meanings and associations attached. For example, the use of opposing concepts, such as young and old or good and bad, connote certain social values, and the use of one or the omission of another is indicative of the ideological framing of the piece (Machine & Mayr 2012, 39).

The second dimension, discursive practice, cannot be analysed through an analysis of the text alone. Fairclough argues that it is impossible to not use words and phrases that have been used before. This is known as intertextuality (Fairclough 2003, 47; Phillips & Jørgensen 2002, 73). Previous texts and discourses are necessarily included or excluded, and it is important to consider the significance of their presence or absence. In the case of news articles, 'voices', such as sources, interviewees, editors, and the journalists themselves are included in various forms. The choice of whether they are quoted directly or whether they are set up against opposing views can tell the researcher much about the ideological nature of the text.

Lastly, the social practice of the text concerns the text's relationship to wider practices, including its relationship to other texts, as described above, but also to its influences in maintaining and contributing towards this narrative. Fairclough sees texts as essentially social and political, and thus these texts have a real effect on the world in the discourses and ideologies to which they subscribe (Fairclough & Wodak 2009, pp. 271-276).

In addition to Fairclough's model, this study will also bring in one of Teun van Dijk's contributions to CDA, the ideological square. Van Dijk suggests that discourse is broadly ideological in its content, and as such the speaker will place emphasis on what they consider important, and de-emphasise what they consider unimportant in order to express beliefs (1998, pp. 266f). Van Dijk considers this a relationship between 'us' and 'them'. He describes all discourse as doing the following (1998, 267):

1. emphasises information that is positive about Us.
2. emphasises information that is negative about Them.
3. de-emphasises information that is positive about Them.
4. de-emphasises information that is negative about Us.

If all discourse is ideological and a differentiation between us and them, how does this relate to stereotyping? Van Dijk argues that the limited knowledge one possesses about a group, which takes the form of a stereotype, informs prejudices and the organisation of beliefs (1998, 61). Much of van Dijk's focus is on the impact of social identity on discourse, and this has an effect on both production and consumption (understanding) of a text. In talking about a group outside one's own, the positive aspects of one's own group tend to be emphasised, along with the negative aspect of the outgroup (van Dijk 2009, 71). This kind of group perception is embodied in polarisation and stereotyping, the latter of which has explicit bearing on this study. Indeed, it is van Dijk's focus on the dichotomous categorisation of 'Self' and 'Other' and its importance in discourse (2009, 71) that makes it the most appropriate form of analysis for the aims and purpose of this study.

Fairclough's three dimensions for linguistic analysis: the linguistic features of the text, the discursive practice, and the social practice (1992, 73), provide the basic framework around which to carry out CDA, but this thesis will also adapt the analytical structure used by van Dijk in his own CDA analyses, which provide clearer guidance for analysing texts and the contexts in which they are produced. Van Dijk splits his analysis across six categories: context, interaction, schemata, meaning, surface structures, and rhetoric (1993a).⁹ For the scope of this thesis, however, in which CDA is just one of the methods being employed, rather than the main focus, the number of categories for analysis needs to be reduced. Thus, this thesis proposes a simplified analytical structure, consisting of:

1. Context
2. Structures (incorporating surface structures and schemata)
3. Rhetoric & Meaning

These three categories reflect the key concerns of both Fairclough and van Dijk, addressing the three dimensions of critical analysis by focussing on discrete linguistic and semiotic features, whilst emphasising the importance of van Dijk's ideological

⁹ Van Dijk originally broke his methodological approach to the analysis of text into the following categories: context, which can be cognitive, social, cultural, or historical; interaction, which refers to the text as a communicative event, through assertions, questions, requests, accusations, and promises; schemata, which is the organisation of the meaning or topics of a discourse; meaning, that is the implications, the presuppositions, and the variable meanings of words; surface structures, which is the expression of underlying meaning, through tone or syntax; and rhetoric, which is the use of language, metaphor, rhetorical questions, etc. (van Dijk 1993a, pp. 119-134).

square, as it is core to the investigation into the presence and role of stereotyping and Orientalism. Let us now consider what each of these three categories means: the first category, context, refers to the setting, medium and audience of the article, thereby broadly addressing Fairclough's second dimension, the discursive practice of text. The importance of the *us vs them* dichotomy is emphasised in the analysis of the roles of Japanese and non-Japanese voices in these texts, and the issue of power relations. The second category, structures, meanwhile addresses the very structure of the text—its syntax (the ordering of words) and deictics (words where the meaning is context-dependent, such as *here* or *you*)—again with a focus on how the divisions between us and them can be found within the text. Schemata is defined by van Dijk as consisting of a 'set of characteristic categories, organized by rules' (quoted in Bell 1991, 163). Lastly, the third category, rhetoric & meaning, addresses the language of the articles themselves, and here metaphors, rhetorical questions, lexical style and all aspects of language will be scrutinised for their use of stereotyping and Orientalist discourse.

An advantage of CDA is that it mitigates one of the common complaints about case study selection: that the case may not necessarily be representative, and that generalisations cannot be made (Idowu 2016, 185). However, even if these stories were not representative of a common discourse, that they are being written at all, and in well-regarded news publications no less, is noteworthy. Moreover, technology was taken as a topic because it has been established that Japan is commonly discussed in terms of technology, not only in the press (Hargreaves et al. 2001), but also in popular culture, too (e.g. *Blade Runner* or *Neuromancer*). Critical discourse analysts are often seen as socially-motivated, looking to address social problems and, through their analyses, do something towards solving them (Fairclough & Wodak 2009, 268; Machin & Mayr 2012; 207f). CDA has a number of advantages over content analysis, though it is not without its disadvantages. For instance, content analysis allows the researcher to analyse a large amount of text or a large number of texts quickly via electronic means. Software exists to automatically extrapolate frequently used lexical words, collocations and concordances, amongst others, and export these as tables and graphs (Baker 2006, 1). CDA requires a significant amount of time to be given over to the analysis of each text, necessitating close readings, making an analysis of a full corpus a gargantuan task. While CDA cannot examine as large a volume of texts as content analysis, it does incorporate some of the strategies and methods of content analysis, as well as involving methods unavailable to the content

analyst. Sparks describes content analysis as being concerned with *manifest content* over *latent content* (Sparks 2002, 20); the manifest content is that material which can be encoded in terms of frequency, collocation, concordance, and so on. The latent content, meanwhile, is that which only becomes apparent after reading the text, referring to what is 'between the lines' (Sparks 2002, 20). Whereas content analysis can only analyse the former, CDA allows the researcher to consider both manifest and latent content, as it is a method concerned as much with what is said as what is *unsaid*.

Another perceived issue with CDA is that there is no set procedure for discourse analysis, something Fairclough himself readily admits (1992, 225). While he provides a set of tools that can be used, operationalising the analysis is up to the individual researcher. On the one hand, this makes the method incredibly flexible and applicable to a wide variety of circumstances, but it is flawed in that it sets no real standard that is common to all researchers. Moreover, some have argued that CDA is not true analysis, but rather 'interpretation' (Machin & Mayr 2012, 208). This means that there can be any number of possible readings and interpretations of a particular text and this author can only provide his. Fairclough himself acknowledges this potential pitfall, but argues that with sufficient textual evidence, one can demonstrate that the 'interpretation is compatible with the features of the text' (Fairclough 1992, 232). Critics of CDA also argue that analysts are able to select only the articles that fit their argument and ignore any others (Machin & Mayr 2012, 208), whereas an approach such as corpus analysis—that is, content analysis of a large sample, or corpus, of text—is a more rigorous approach, since it provides statistical data for what the analyst is looking to prove. CDA has been selected for this study, however, because simple statistical data would not be sufficient for an assessment of stereotypes and Orientalist attitudes. While counting the frequency of words and phrases is helpful, and indeed is even a part of discourse analysis, it is necessary to look beyond these and examine the discourse as a whole, examining what is *not* said as much as what is. As such, all texts across the two samples have been analysed individually according to the three categories of analysis established by the analytical framework proposed for this study.

Bias is another concern for those who have criticised discourse analysis, as reading into the unwritten assumptions in a text and discourse is a matter of interpretation and thereby a matter of subjectivity, rather than objectivity. Baker argues that this should be mitigated by acknowledging that the researcher is involved in their own research and that the researcher plays an active role in producing results (Baker

2006, 10). He appeals to Bhaskar's term critical realism (1989), 'an approach to social research which accepts that we perceive the world from a particular viewpoint, but the world acts back on us to constrain the ways that we can perceive it' (Baker 2006, 11). In regard to this thesis specifically, it should be acknowledged that the author's own recognition of stereotyping about Japan in the press is a consequence of bias. Mynatt, Doherty and Tweney observed that one tends to notice evidence which confirms their claims and thus potentially ignore evidence to the contrary (Mynatt et al. 1977, pp. 85-95). Stake (1995, 95) echoes many of the above concerns, and argues that the reader should be given 'a good look at the researcher', as while bias can be mitigated to a large extent, an argument can never be free of it and it is better to make the reader aware of these dangers.

No method is without its problems, but by using multiple methods, the researcher is able to carry out a much more rigorous and thorough study. In the case of this current research and the triangulation of the answer to the research question, additional forms of analysis are necessary. While CDA of the articles may expose Orientalist and Techno-Orientalist understandings of Japan and stereotypical depictions, another important aspect of the study is how much these claims can be evidenced. Orientalism and stereotypical depictions present distorted images of Japanese society, but stereotypes often have some 'kernel of truth' (Pickering 2001, 25). One aim of the study is to reconcile these distortions with the actual situation. In news articles, it is the voice of the journalist that reaches the audience, since it is their words on the page. Even when articles involve interviews and quotations, it is at the discretion of the journalist what is included and excluded, or what is put in direct quotation or paraphrased. Moreover, news articles do not provide references for their information as one would in an academic article. Indeed, it is up to the reader to do any further research if they wish to verify these claims. There is thus a need to balance this out with statistics, empirical verification, and Japanese voices, and here the study employs observations and interviews, which are discussed in the following sections.

Fieldwork: Observation

Two short, highly-focused research trips were carried out in October 2015 and then again in October 2016 in order to carry out the second and third methods: observation and interview. In advance of both periods of fieldwork, the trips were

carefully planned, including alternative plans for contingencies, for example if an interview were cancelled. Discussion of the fieldwork has been split according to the two forms of research carried out during the trips, and detailed information regarding the planning and execution of the research, as well as the analysis of the data, will be given in their respective sections, beginning with discussion of the observations.

Observation can be used in case study research in a number of ways and at different stages of a research project. For example, at the beginning of studies, researchers often use observation to 'case the joint', getting a feel for the surroundings (Payne & Payne 2004, 158). There are two kinds of observation: participant observation and detached observation, the former placing the researcher as an involved participant, and the latter keeping the researcher separate, as an observer (Dawson 2009, 32; Gillham 2005, 46). Observation has the benefit of being 'the most direct way of obtaining data', but has the problems that it is time consuming and the data is not always useful (Gillham 2005, pp. 46-48). Observation also works well in multi-method approaches, like the case study approach adopted for this project, as it provides a different form of evidence that can be used in conjunction with others, all working towards addressing the same research problem (2005, 49).

In this present study, the observation method was employed in order to see how visible these technologies were in Japan: on the streets, in shops, and in offices. Detached observation was ideal for this purpose, as it was important to see these technologies in daily life, rather than through the arranged meetings with manufacturers, who could present a biased view. Participant observation was also considered, but as a method it can be very time-consuming, lasting months, with some studies even taking years to complete (Dawson 2009, 33). Participant observation is primarily concerned with gaining an understanding of the behaviours, motivations and attitudes of the groups being studied, and as such is best suited to a long-term ethnographic study, often in the field of anthropology or sociology (2009, 33), rather than a study like this, which focusses on press representation.

For each example technology, the observations were planned differently, and will be explained in full in their respective chapters. However, both sets of observations were directed by a shared, clearly defined purpose, as established by the third subsidiary question: to what extent can these stereotypical depictions be evidenced? Observations thus required finding evidence of these two technologies, fax machines and robots, being sold and/or used in Japan. For both example technologies, this

involved visiting consumer electronics stores in Japan, albeit for slightly different purposes: for fax machines, it was to see if they were available for general purchase or if they were a niche item, whilst for robots, it was to see not only if they were on sale, but also if they were used in these stores in customer-facing roles, as per news articles. For the example of robots, observations were made at specific locations, as informed by the news articles sampled for this example technology.

Observations were recorded in a timely manner, in notes taken by the author during the periods of fieldwork, as well as in photographs. In the case of photographs, those taken in shops or offices were done so with full permission obtained. Since this study employs detached observation, it does not have the same ethical and moral barriers that participant observation has, since this requires integrating oneself among a group. Issues can arise from this kind of observation, such as the consequences of it becoming known that you are a researcher, if this was not known to the group (Dawson 2009, 106), or if your participation causes anxiety or distress to the group (2009, pp. 107f). Observations in this study largely did not involve observing people, but checking the availability and presence of the chosen technologies in certain locations, with the exception of an observation carried out at a care home. This observation for the robot example technology was intended to examine the extent to which the claim in news articles that robots are being used to care for the elderly can be evidenced. While this observation did involve limited observation of elderly residents, it was carried out within an organised group tour, arranged by the local prefecture administration, and overseen by care home staff.

Fieldwork: Interviews

In addition to the observations, in answering the third subsidiary question, interviews are also employed. Drawing on the findings of the CDA and the stereotypical assumptions found therein, interviews are used as an integral method in order to assess the extent to which claims in news articles can be evidenced. These interviews took place during the two fieldtrips, in October 2015 and October 2016, alongside the observations. Carrying out this part of the research involved two trips to Japan to conduct fieldwork: the first visit in October 2015 concerning the use of fax machines in Japan, the second visit in October 2016 concerning the use and proliferation of robots in Japan. This necessitated the visiting of the manufacturers of

such technologies, as well as companies making use of these technologies (at least, would be, according to news articles).

Interviews for both example technologies were concerned with three broad categories, which were slightly adjusted for each set of interviews. While these will be explained in detail in their respective chapters, a brief overview of the categories are given here, these being:

- 1) The use and purpose of the technologies
- 2) Opinion on these technologies and alternatives
- 3) The future of these technologies

Firstly, for both example technologies, interviews with representatives from the manufacturers of these technologies were carried out. Manufacturers continue to produce fax machines for the Japanese market, so the technology is clearly still in demand to some extent. By talking to those who manufacture these technologies, it is possible to learn how the manufacturers themselves perceive the relative importance of their products. Why are manufacturers trying to keep the fax machine alive? Interviews with robot manufacturers, such as Toshiba and Toyota provide useful insights into how the manufacturers themselves perceive the technology: are they being produced for their value as entertainment? Or do the manufacturers see their technologies having a more serious impact upon society, both in the present, and in years to come?

In the example for low-tech Japan, a purposive sample of interviews from ten companies and three fax-machine manufacturers was obtained. For the ten company interviews, a broad range of companies across seven industries were specifically selected, encompassing industries where technology use might be comparatively low, such as the construction industry, as well as industries with potentially high technology use, such as the IT industry. Companies were identified as potential interviewees either through Internet searches of companies in the Tokyo area according to different industries, or through snowballing. Snowballing is a way of identifying research participants and interviewees through known contacts (Atkinson & Flint 2001, n.p.), and is particularly useful in research where access to target groups can be difficult. While this usually refers to marginalised and vulnerable groups, researchers have described Japan as being hard to access for interview as a result of Japanese corporate culture, which requires the researcher to be introduced to representatives from the company by a mutual third party (Culter

2003, 219). It is called snowballing, because once the researcher has been introduced to another potential research participant, that participant may then be able to suggest further possible participants, allowing for the sample to gradually expand (Atkinson & Flint 2001, n.p.).

While companies were specifically chosen, which risks bias (Dawson 2009, 51), they were picked so as to ensure a balanced spread of industries and company sizes from SMEs to multinationals. and thus be as representative as possible. Moreover, purposive sampling was the most appropriate means by which to determine the interview sample, as the alternative is probability sampling (2009, pp. 49-55). Probability sampling would involve obtaining the details of every company in Tokyo, or, on a larger scale, Japan, assigning each of these companies a number, and then using a computer to generate a random sample to contact (2009, 50). Probability samples can be used to make generalisations from the findings, but requires that the randomly generated sample be drawn from a fully comprehensive list of every company in Tokyo (or Japan) in order to be representative (2009, 50), which would have been beyond the scope of this thesis. Moreover, purposive sampling allows for the selection of specific types of participant so that there can be a range of different responses, which cannot be guaranteed with a random sample.

As for the second example technology, companies known to be using robots during the period of observation, particularly in situations involving customer interaction, such as retail, were contacted for interview. Such companies were identified during the news article collection stage, as often specific robots were named as well as specific companies and locations in which they were said to be in use. As such this second case differs from the first, as rather than a purposive sample of a broad representation of Japanese companies, specific companies mentioned in the articles themselves were contacted, including the 'robot hotel' Henn-na Hotel and Nestlé. Three companies known to use robots were interviewed, and a further two robot manufacturers were interviewed, too. The respective example technology chapters (Chapters 4 & 5) will go into greater detail about the individual companies, as well as the results of the interviews themselves.

In the section on the selection of methods, it was established that there are three main types of interview: unstructured, semi-structured, and structured. In addition to these, Kvale and Brinkman (2009) identify several other variations: computer-assisted interviews, focus group interviews, factual interviews, conceptual interviews, narrative interviews, discursive interviews, and confrontational

interviews (2009, pp. 147-160). Some of these variations denote the medium or setting through which the interview takes place, such as in computer-assisted interviews or focus group interviews, rather than the kinds of questions asked, as is with the three main interview forms. The type of interview the researcher chooses depends on the specific research being carried out, and the kinds of information the researcher wishes to elicit (2009, 147).

This thesis uses semi-structured interviews, using a non-exhaustive set of questions. Yin describes case study interviews as 'guided conversations rather than structured queries' (2009, 106), meaning that although there is a set of questions, the interview itself is not rigid (2009, 106; Rubin & Rubin 2011). Semi-structured interviews were more appropriate than other forms of interviewing, such as structured interviews which are more useful for obtaining statistical information (Dawson 2009, 29) or unstructured interviews, which are used when the interviewee's personal experiences are important to the research (2009, pp. 27f), and does not suit interviews where specific information needs to be acquired. Interviews with representatives from manufacturers were focussed interviews (Merton et al. 1990), since these allow for a series of questions to be asked within a short period of time. This would be more appealing to a company employee, since they would not have to give up a lot of their time, and would thus be more likely to agree to participate.

As Williams (1994, 20) notes, analysis of data collected from interviews can be 'longwinded and difficult' and one has to be careful not to take comments out of context. It is possible to analyse interviews using CDA, as outlined in the document review section (Kvale & Brinkman 2009, 197); however, it is better suited to interviews where the focus is on the discourses of the interviewees and the organisation of language (2009, 226). In this thesis, the focus is on the meaning of the interviews; in other words, what the content of the interview is. In this regard, Blaxter, Hughes and Tight (2011) focus on grounded theory, a methodology developed by Glaser and Strauss (2001, pp. 211f; Blaxter et al. 2011). Using this analysis method, interview transcripts are coded in terms of key concepts—in much the same way as in content analysis, as described by Berg (2001)—in a process known as open coding. Through coding, meaning is assigned keywords to allow for later identification, and the interview can be condensed down to its meaning (Kvale & Brinkman 2009, pp. 201f). Open coding can be broken down into two stages: axial coding and selective coding. Firstly, axial coding organises the content of the interview into general concepts, which are grouped into themes. Selective coding then organises these

concepts and themes into categories, in a way that 'articulates a coherent understanding or theory of the phenomenon of study' (Cohen & Crabtree 2006).

The advantage of this method is that the results feed into the development of the study itself, for as results are analysed, the concepts of relevance to the study become clearer, allowing the researcher to better structure the next interview (Cohen & Crabtree 2006; Blaxter et al. 2001, 212). Coding presents the information in a way that is immediate and short, while capturing the 'fullness of the experiences and actions studied' in the development of categories (Kvale & Brinkman 2009, 202). Moreover, as part of the mixed-methods approach of this thesis, the categorisation integral to open coding brings a quantitative dimension into the research, and allows for interviews to be directly compared to one another.

Due to the fieldtrips being of short durations, interviews had to be arranged according to a strict schedule. If potential interviewees were not available for in-person interviews during the dates the author was in Japan, Skype or email interviews were offered. Moreover, potential interviewees were contacted before flights were booked in order to ensure flexibility on the author's part. Obtaining the interviews themselves is a highly important and lengthy process in research, and thus extensive planning and preparation went into identifying and contacting interviewees, compiling interview questions and carrying out the interviews themselves so that the most useful data could be obtained.

Arranging interviews in Japan is not only a lengthy process, but it also requires a knowledge of Japanese culture and social conventions. According to Cave, precision and concreteness are essential when making first contact with the prospective interviewee (Cave 2015). This requires an introduction detailing who you are, the nature of the research project, why this person is being contacted, and what your expectations are (2015). Culter, writing about her experience as a PhD student, highlights the importance of introductions to gain access to interviewees (Culter 2003, 219). Roberts (2003, pp. 296-305) also notes the importance of formal introductions, as well as the importance of gaining official agreements from companies to interview their staff.

This being the case, one has to know someone who can provide such introductions, which as a consequence adds a level of bias. That is to say, not all companies will grant access and interviews will only be granted by those who have a predisposition to do so. This could of course also extend to companies that are more than happy to be

interviewed on a certain topic because it could have positive outcomes for their image. In the author's own experiences with interviewing Japanese companies, if an introduction was not provided by an acquaintance, but an interview was achieved through direct contact, often the interviewed company would expect a certain level of tit-for-tat. For example, the company may ask a report be produced from the outcomes of the interviews, or for access to the completed thesis.

Ethics & Informed Consent

Aside from the issue of potential bias in the selection of interviewee (and their consent to participate in the research) described above, there are other problems associated with research, too. Krauss (2003) recommends using an audio recorder during interviews with Japanese, or to have a Japanese research assistant present (regardless of one's own Japanese competencies), because the Japanese interviewee will feel more comfortable giving detailed answers, but it is a double-edged sword, as the interviewee might not be so candid when giving important information when being recorded (2003, 182). Thus, when possible, audio recordings were made of interviews, in order to ensure that the full responses could be analysed at a later date. Moreover, for the purposes of fluency, accuracy and detail in interviews, interviews were almost always carried out in Japanese, something which Coleman (2003, 110) argues is essential for doing fieldwork in Japan, particularly when first establishing contact with the potential interviewee and for explaining the aims of the research.

Initial contact with all prospective interviewees was made via email. In the case of companies, these were directed to either public relations, secretarial or departmental addresses, rather than directly to specific persons. The purpose of this was to secure introductions before suggesting any kind of interview. Culter also highlights the issue of time for prospective interviewees, since higher-level interviewees would be very busy and would not be able to give over a great deal of time to an interview (2003, pp. 218f). Thus, delivering the interview in an efficient manner is important (2003, 218). To achieve this, prospective interviewees were given a list of questions in advance so that they were able to give a comprehensive answer on the day. Moreover, full details of the project were disclosed, including the nature, aims and purpose of the study, as well as information regarding any potential for publishing and also the privacy and confidentiality of the participants.

Ethical issues such as the interview procedure, the consent of the interviewee, and concern over confidentiality were fully considered and a consent form was drawn up. The interviews were approved by and conducted in accordance with the Cardiff University Research Ethics Committee. The case study was also developed according to the standards of the Committee and under the guidance of the project supervisors. The Data Protection Act 1998 was consulted for the study, with which it complies. Furthermore, the study also follows the school's research policy, as well as the Universal Ethical Code and ESRC Framework for Research Ethics (ESRC 2015), which are supported by the university. Participants' data have only been used if permission was given and a consent form signed. Interviewees who desired to remain anonymous were able to do so, and any use of names has been done in accordance with informed consent procedure. All participants were informed in full about the research project in advance, including the nature, purpose and methodology of the project. Any risks or benefits associated with the project were clarified. Participants were informed how they could communicate their concerns or complain about the research, and all participants were free to either consent or refuse to participate in the research at any stage of the project. In addition, during observation work and at some interviews, photographs were taken for inclusion in the thesis, for which permission was sought in advance. Blank copies of the informed consent forms can be found in the appendices of this thesis.

Conclusion: A Multimodal Research Strategy for Triangulation

This chapter established that this thesis will adopt a case study design, taking Japan as its case in order to investigate the extent to which stereotyping can explain the coexistence and persistence of contradictory depictions of Japan's relationship with technology in the British press. In order to illustrate the contradiction, it was necessary to provide examples of such depictions. By treating these examples as sub-cases, articles about fax machines in Japan were chosen as an example of a low-tech depiction of Japan, whilst articles about robots in Japan were chosen as an example of a high-tech depiction of Japan. These two sub-cases represent what Mill (1843) and, later, Sartori (1970) call most-dissimilar cases.

A case study, as this chapter has found, is not a method in of itself, but is comprised of a number of discrete methods, which can work together in synthesis in order to triangulate an answer to the overarching research question. In operationalising the

case study, this thesis focusses on three methods: document review in the form of CDA, interviews, and observation. Each of these methods will approach the overarching research question from a different perspective, addressing one or more of the three subsidiary questions established in Chapter 1. Indeed, no single research method can adequately address the overarching research question in its entirety, and as such the employment of a case study is a strong approach for attempting to unravel the complex and multimodal elements involved in the research question.

Furthermore, through the repetition of the above methods, the researcher is able to attain closer and closer triangulation, minimising 'misrepresentation and misunderstanding' (Stake 1995, pp. 108f). With each additional observation, the researcher's interpretation is revised and a more accurate understanding can be produced (1995, 110). By analysing a range of articles, and by interviewing representatives from a number of different companies, this thesis aims to construct images as accurately as possible, which will ultimately provide the evidence and insights required to answer the research question.

The triangulation itself will occur throughout the thesis and particularly in Chapter 6, an evaluative chapter which brings the findings of both case studies together, assessing the similarities and differences between the findings. Additionally, this chapter will also bring in additional evidence to address gaps left in the argument. While the interviews and observations described above serve to determine the accuracy of the media portrayal of technology in Japan, in terms of triangulation, the author is still left with the problem established by CDA of the processes of production in discourse. As such, a third set of interviews were arranged, this time with foreign journalists living in Japan and writing about Japan for foreign publications. These interviews sought to gain a better understanding of journalistic procedure and how these articles come to be. Through the examination of the contexts within which a text is created, one can gain a greater understanding of the motivations and purposes behind a text, which can go a long way in explaining discursive and linguistic choices, the use of imagery and the unstated assumptions that are made by the author. The insights gained from these interviews will be brought out in this evaluation chapter and combined with the other strands of analysis in order to reach a comprehensive answer to the research problem.

While there are a number of ways to carry out document review (such as content analysis), CDA was found to be the most appropriate form of textual analysis for this study. Whereas content analysis has established in previous studies that stereotyping

was indeed present in writing about Japan in the British news media (see Chapter 2), CDA analysis of the news is to be carried out to explore how the stereotyping is manifested, examining the stereotypical assumptions underlying the articles. CDA demands that one consider not only the text, but also the wider practices of its production, as the text cannot be considered an isolated unit in itself, but is part of a wider discourse. The need to consider a wider context means that CDA is not only compatible with interviews, but can also be informed by them. Interviews will be used to establish the extent to which news articles can be considered accurate, and used to understand how and why any discrepancies may arise.

In each of the two example technology chapters, the chapters will begin with CDA of the assembled body of news articles, analysing them for their structure, their use of language and rhetoric, as well as underlying assumptions and meanings. These assumptions about Japan and its relationship with the technology in question (fax machines in example of low-tech Japan, robots in the example of high-tech Japan) have then been used to construct sets of interview questions, in order to test the accuracy of such assumptions. Results of these interviews will then be coded according to the process of open coding described above and then analysed. Finally, after both case studies, an evaluative chapter will bring the findings of both case studies together in order to untangle the paradox of contradictory depictions of Japan and address the question of how stereotyping and Orientalism impact the reporting of Japan in the British press. The thesis will then conclude by considering the possible impact that these depictions might have on the British public's perceptions of the Japanese, since the news sources sampled for this thesis are widely consumed. The conclusion will then discuss how the methodological approach taken for this study, as described in this chapter, could be applied to other topics of reporting of Japan, beyond technology, to press representation of Japan by other countries, and the applicability of the methodology to cases other than Japan.

Chapter 4: Low-Tech Japan

Having established the methodology which will be used to analyse how stereotypical depictions of Japan are portrayed in the media, this chapter will focus on the first of the two example technologies: fax machines. In addressing the research question ‘To what extent are contradictory depictions of technology in Japan in the British press rooted in stereotyping, and how can they coexist?’ this chapter will analyse one specific example of low-tech Japan, that of faxing in Japan, which in the fifteen-year sample first arose in British newspapers in 2012 (*BBC News* 2012) and articles continued to feature this depiction through until the end of the sample. That this depiction of Japan as a low-tech country exists alongside that of Japan as a country producing some of the world’s most advanced robotics is something of a puzzle, which is why both depictions are being examined in turn.

The previous chapter introduced a visual scale to illustrate this puzzle (Figure 3.1), positioning Japan at either end of a spectrum of technology use, from low to high. This chapter is concerned with the left-hand side of this scale, which positions Japan as having a low-level of technology. In this chapter, news articles writing about this fax-using Japan will be analysed using CDA according to the methods described in the methodology chapter in order to tease out any underlying stereotyping and Orientalising that is in use. Extant literature suggests that stereotyping and Orientalising are the causes of exaggeration about Japan in the press, and this has been used to create a framework around which the CDA is based.

The introduction (Chapter 1) set out three subsidiary questions to be addressed in this thesis in order to answer the overarching research question, and these example technology chapters will address the first and third subsidiary questions:

- 1) To what extent are stereotypical depictions present in news articles about technology in Japan?
- 3) Are contradictory stereotypical depictions supported by evidence?

Only after the example technologies have been analysed can they be brought together in order to answer the remaining two subsidiary questions, before resolving the overall research puzzle of contradictory depictions. Accordingly, the chapter is split into two sections, in order to address the first and third subsidiary questions

respectively. As the methodology chapter (Chapter 3) explained, a case study design as it lends itself to a mixed methods approach, enabling the author to address these two perspectives. Below, the reader will be briefly reminded of these methods and how they will be used within this thesis' overall research strategy and in this chapter specifically.

The first section will describe how low-tech Japan is depicted in British news media and the extent to which these depictions rely on stereotyping and Orientalising through CDA of sampled articles. The section will begin with a brief summary of CDA methods, which will be followed by a description and analysis of the data obtained. By the end of this section, it will be shown how Japan is indeed widely depicted as low-tech: and particular attention will be given to the language, assumptions, authority on which these depictions rest.

The second section focusses on the third subsidiary question, building upon the findings of the CDA, extrapolating the stereotypical depictions and assumptions found within the news articles, and investigating how these depictions arose. Through fieldwork and interviews, the depiction of Japan as presented in news articles will be judged for its veracity and accuracy. Interviews carried out with manufacturers of fax machines as well as with a sample of companies representing different industries will be used to test the claims made in news articles.

By the end of the chapter, the reader will have a clear understanding of the relationship between the depiction of low-tech Japan as seen in the news media, both print and online, and the stereotypical knowledge and assumptions that inform and frame the understandings of journalists. As the literature review showed, stereotypes are readily accessible forms of categorisation that enable quick decision-making when faced with a similar situation to one experienced before, but stereotyping is also dangerous as the overreliance on stereotyping and stereotypical depictions leads to gross generalisations and exaggerations. Is this the case only in news articles? Moreover, could the reliance and propagation of stereotypical depictions have consequences on people's lives? These are questions that will carry through to the end of the thesis, and will be considered in the concluding chapter, after bringing together the analyses of the two cases. In this chapter, it will be shown that attitudes towards faxing and fax technology displayed by interviewees in this present research do not align to the depictions found in the news articles.

Section One: Critical Discourse Analysis of News Articles

As the methodology chapter (Chapter 3) explained, the sample of news articles was chosen from nine British news sources, including a mixture of web-based publications, as well as traditional print media. Articles were selected within a time range from 2000 to 2015 and searches were carried out for articles featuring the keywords 'Japan' and 'fax' in either their headlines or lead paragraphs, including variations such as 'Japanese' or 'faxing' through the use of Boolean search modifiers. This yielded 18 articles in total, across all the publications in the date range, excluding articles with fewer than 50 words, as these do not lend themselves to CDA. While there is no minimum length for articles in CDA, its methods focus on an in-depth analysis of the text (Janks 1997, 335), and is thus best suited to longer, more detailed texts. Details of the sample, including keyword frequencies, can be found in Appendix 1 at the end of this thesis.

As shown in Chapter 2, extant literature would suggest that Orientalist discourse frames the reporting of news stories pertaining to technology and Japan, and CDA allows for this to be tested through the examination of patterns of language use and ideas across the texts. Are Orientalist ideas in fact present in these articles? This includes explicit mention of Japan being 'different', or underlying assumptions, which are identified through analysis of the texts. As primarily a study of stereotyping and Orientalism in the press, this study also uses one of Teun van Dijk's contributions to CDA, the ideological square (van Dijk 1998, pp. 267-269). While this was discussed in detail in the methodology chapter (Chapter 3), it can be briefly summarised as the notion that discourse emphasises the negative aspects of 'them', while emphasising the positive aspects of 'us'. Van Dijk's positioning of Othering as crucial to discourse and the CDA method itself means that CDA is well-suited to this case study. Beginning with a brief reminder of the methods and structure of CDA, the next subsection describes the analysis of the articles, and places a particular emphasis on illuminating examples of the 'us' and 'them' dichotomy.

Analysis

Following the methodology established in Chapter 3, the analysis uses van Dijk's analytical structure (van Dijk 1993a) for CDA as its basis, which this thesis has streamlined as this study is not purely CDA, but is using it as just one method amongst

others. The analytical structure divides the components of analysis into distinct categories, which are: context, structures, and rhetoric and meaning.

The main aim of the CDA is to identify any clear evidence of stereotyping that underlies reporting about Japan, specifically the particular instantiation of stereotyping that is Orientalism, which is the (un)conscious Othering of the East. For Fairclough and van Dijk, CDA is chiefly concerned with such matters of power and dominance in discourse (Fairclough 2003, 55; van Dijk 2009, 111), and this is found through analysing different elements of the text. By analysing the texts according to each category of analysis in turn, such discourses will be revealed. The analysis now begins with this first category, context.

Context

Context refers to the wider discourse and discursive practices in which the text is located, constituting Fairclough's second dimension (Fairclough 1992). As established in the methodology, context is largely refers to the setting, medium and audience of the article. Van Dijk considers access to be a highly important aspect of a text's context, though he readily admits that this term can be difficult to define. To resolve this, he offers the definition of access being how 'language users or communicators have more or less freedom in the use of special discourse genres or styles, or in the participation in specific communicative events and contexts' (van Dijk 1993b, 256). In other words, in different discursive domains, certain people hold discursive power. Let us consider the sample of articles assembled for analysis here. While these articles are a mixture of print and web-based texts, they share the commonality that they have been written by a journalist. It is the journalist whose voice is carried by the words of the article, and the inclusion of others' voices is not guaranteed. Above the journalist, however, is the editor, to whom the journalist is accountable, and who is able to direct the journalist to write about specific topics. The influence of the editor is not visible in the articles themselves, but will be considered in Chapter 6, which examines the specific roles of journalists and editors in the production of texts and the journalism profession.

As it is the journalist who takes the position of authority in the text itself, informing the audience about why the technological status quo is the way it is, this means that Japanese voices have a limited role in the discourse, unless the journalist themselves are Japanese. This is what Fairclough calls 'interactional control', referring to the relationship between speakers and the person setting the conversation agenda (Fairclough 1992, pp. 152ff). When corroboration with a source is required,

journalists may appeal to both Japanese and non-Japanese authorities. These non-Japanese voices will be Japan-based, such as 'Patrick McKenzie, boss of Starfighter, a software company with operations in Tokyo and Chicago' (*BBC News* 2015). When Japanese voices are heard, however, they are given some discursive power through direct quotation, rather than reported speech. This can be seen in *BBC News* 2012, *BBC News* 2015, and *The Independent* 2013. While quotations may be no more than a couple of sentences, it enables the Japanese voice to have a level of representation that shifts the balance of power, whereas indirect speech would leave that power in the hands of the journalist. Nevertheless, as it is the journalist who chooses which quotations to use, including shortening and extracting 'soundbites', discursive power remains mostly with the journalist.

Analysing the context in which these articles were produced also requires looking at the sample as a whole, for together they contribute to and are informed by a larger discourse on Japan. Of the 18 articles analysed for this case, thirteen are web articles, while the remaining five are from print publications. As some publications have print and online editions, in quotations it is clarified whether they come from a print or web article, though in the case of online only sources like *BBC News* such distinction is unnecessary. Within this sample, the lengths of the individual articles vary greatly, ranging from the shortest at eighty-one words (as articles with fewer than fifty words were omitted from the initial search) to the longest at 1,353 words (*The Guardian* 2000, and *BBC News* 2005 respectively). Across the different media, print and online, there was no discernible correlation between medium and article length, with both types featuring a mixture of short- and long-form journalism. In terms of genre, shorter articles tended to concern discreet events that had occurred, such as the launch of an e-commerce platform (*BBC News* 2000), the awarding of a prize to a Japanese architect (*The Guardian* 2014) or the implementation of iPads for sumo wrestlers (*The Metro* 2010). Long-form articles, on the other hand, were primarily feature pieces, following the distinctions by Bell (1991), wherein features and 'soft' news in general are defined by their lack of immediacy and the linguistic freedom they allow for journalists (Bell 1991, pp. 14f). Examples include two travel guide-style pieces (*BBC News* 2005; *The Telegraph* 2008) and articles about fax-using Japan (*BBC News* 2012; *BBC News* 2015; *The Independent* 2013).

As well as the producer of the text, it is also necessary to consider the consumption of the text, in other words the audience. Within the sample, the publications with the most articles in the sample are *BBC News* (5) and *The Guardian* (8). *BBC News* and *The*

Guardian are both in the top three most highly read online British news sources and *The Guardian* ranks among the top ten most read print publications (see Table 3.1).

Structures

In the sample, the 18 articles can be split between articles wherein the articles are specifically about faxing in Japan, and those where faxing or faxes are mentioned, but the story is otherwise unrelated. This has a significant bearing on the schema of the text, that is the organisation of the text, the structure of the sentence, and the overall 'superstructure' (van Dijk 1988, 14). Van Dijk argues that news schemata can be broken down into six categories (van Dijk 1988, 14), which broadly follow the categories defined by Labov and Waletzky for personal narratives: the abstract, a short summary which introduces the topic; the orientation, which provides the setting, such as time, date and location; the complicating action, which sets up the situation; the evaluation, which provides meaning for the situation; the resolution, which is where the problem is solved; and the coda, which is the final clause bringing the reader back to the present (Labov & Waletzky 1967):

This narrative structure is very similar to an argument, and it is the arguments about Japan and faxing which will be examined here. In articles where fax is mentioned in passing, the usage of a fax machine is not questioned and is thus written in unmarked language. Over half of the articles in the sample are not about faxing in Japan specifically, and in many cases the faxing might not even be taking place in Japan. What is distinct about these articles, however, and what makes them useful for this analysis is that faxing is treated as a normal communication method, such as in the examples below:

<p>'customers will be able to shop by internet, telephone and fax' <i>BBC News</i> 2000</p> <p>'Belgians backtracking in row over fax' <i>Daily Mail</i> (print) 2001</p> <p>'our offices have been flooded with letters, emails and faxes from all over the country' <i>The Daily Mirror</i> (print) 2002</p> <p>'Real Madrid secured his signature, confirmed by fax' <i>The Guardian</i> (print) 2003b</p> <p>'But I spent half the week in the house surrounded by faxes, scripts, emails' <i>The Guardian</i> (print) 2004</p> <p>'people are very polite, listen intently to what you say, and then ask for a fax' <i>BBC News</i> 2005</p> <p>'the hissing serenade that preceded an important fax' <i>The Guardian</i> (online) 2007</p> <p>'being amazed by a hand-held fax machine?' <i>The Telegraph</i> (online) 2008</p> <p>'who have until now relied on telephone or fax' <i>BBC News</i> 2010</p> <p>'when you finish a roll of tracing paper or fax paper' <i>The Guardian</i> (online) 2014</p>

Rather than grouping the above articles according to source, they have been listed here according to publication date. The reason for this is to illustrate an important aspect of the research that is pertinent to this analysis, which is the temporal dimension. Discussion of this would normally be found in the context subsection above, but it has been included here as it is a key factor in the differentiation between the argumentation found across the articles. The majority of the articles where faxing is described in unmarked language are from the early 2000s, whilst only two articles are from the 2010s. What can be inferred from this is that since 2000 and the early 00s, faxing has gone from being a typical, everyday technology, where it is placed alongside telephone and email, to being a comparatively rare technology in the 2010s. Indeed, the one mention of faxing in *The Guardian* is from a piece on a Japanese architect who is known for his use of recycled cardboard (*The Guardian* 2007).

In a keyword search of LexisNexis' UK National Newspapers collection, between the same period of 2000 and 2015, 2,015 articles were found with the keyword 'fax', in both online and print articles. Since this database did not include all nine sources used in this study, data obtained here was combined with additional keyword searches on news sites and Google domain search, which limits results to specific websites. The results have been put into Table 4.1 below, which compares the results of this search (presented in the rightmost column) with the original sample.

Web Rank	Print Rank	Publication	Mentions of 'Japan' and 'fax' in headline and lead paras between 2000 and 2015	Mentions of 'fax' in headline and lead paras between 2000 and 2015
1	N/A	<i>BBC News</i>	5 (online)	1,710 (online)
3	1	<i>Daily Mail</i>	1 (print)	71 (online) 281 (print)
4	4	<i>The Guardian</i>	5 (online) 5 (print)	121 (online) 1198 (print)
5	5	<i>The Telegraph</i>	1 (online)	65 (online) 1076 (print)
10	3	<i>Daily Mirror</i>	1 (print)	41 (online) 3804 (print)
12	N/A	<i>The Independent</i>	1 (online)	161 (online) 316 (print)
13	N/A	<i>IB Times</i>	0	109 (online)
17	2	<i>The Metro</i>	1 (online)	235 (online) 56 (print)
18	N/A	<i>Sky News</i>	0	2 (online)

Table 4.1 Mentions of 'fax' in Articles in Selected News Sources, 2000-2015

The results of the keyword search found that the number of articles mentioning fax declined in the first few years of this period, with fewer articles being written after 2010. One major exception to this is usage of fax in football, where it was until recently the standard method of communication used for player signings¹⁰, and in reporting of legal cases, as faxing is still used for some official purposes. Whilst the reduced number of references to faxing in later articles within this search is evident of the fall in use of the technology, the 2012 *BBC News* article (*BBC News* 2012), marks a demonstrable shift as it specifically marks faxing as outdated. This same year an article on *The Guardian* website uses the demise of the fax machine in a discussion of the education system, with the headline 'Should the current model of education go the way of the fax machine?' (Kaye 2012).

¹⁰ While fax machines themselves are no longer used, 'desktop faxes' are still used in player transfers (Premier League 2017), though this is only a recent transition, as in 2016 electronic signature company DocuSign were calling for an end to faxed transfer deals in UK football (McMath 2016). Faxing is still a common method in US sports transfers, however (Dunleavy 2017).

The perceived decline of faxing makes the existence of these articles about faxing in Japan interesting, because the topic has been deemed newsworthy enough to be written about. But how is this topic written about? Returning to the sample of articles featuring both the keywords 'Japan' and 'fax', the structures very much follow the categories of personal narrative described above. First of all, articles begin with the abstract, which is a brief summary of the topic of the article:

'Fax machines gather dust in parts of the world, consigned to history since the rise of the email. Yet in Japan, a country with a hi-tech reputation, the fax is thriving' (BBC News 2012)

The articles will then move on to an orientation, which is the scene setting, establishing what the article is about and where it is set:

'At Japan's talent agency HoriPro Inc, Yutaro Suzuki is busy writing up his next project proposal. Not typing, but writing by hand' (BBC News 2012)

This is then followed by the complicating action, which is the 'what happened next?' of the article, illustrating the problem that has arisen:

'In a country which boasts one of the fastest broadband speeds in the world, Suzuki thinks his affection for the fax may be a rare case in such a tech-savvy country. But 87.5% of Japanese businessmen surveyed by the Internet Fax Research Institute say that a fax machine is a crucial business tool' (BBC News 2012)

An evaluation comes next:

'Firstly, the culture of handwriting is firmly rooted here. For example, the majority of resumes are still handwritten because Japanese employers are said to judge people's personalities from their writings' (BBC News 2012)

Towards the end of the article's argument, a resolution is offered:

'The Internet Fax Research Institute says that more Japanese companies are keen to use e-fax (a fax sent using the internet) due to advantages such as cost reduction, business efficiency and environmental friendliness' (BBC News 2012)

And lastly, there will be the coda, which brings the audience back to the present:

'and there it is, on his summer party invitation, a map to the venue with every detail that partygoers need' (BBC News 2012)

The above illustration of the news schemata uses just one article, but across the sample, articles generally conform to this structure, and is particularly evident in longer articles. Having defined these articles in terms of their schemata, attention can

now be turned to more specific aspects of the ways in which the articles are put together, namely their surface structures. Surface structure refers to the actual construction of the text, rather than the inherent meanings contained within the unwritten assumptions and perspective of the writer, which will be addressed in the next subsection. In particular, syntax (the arrangement of words), anaphora (referring back to a word through pronouns such as *it*, *he*, *she*, etc.), and deictics (words where the meaning is dependent on context, such as *here* or *you*) are of specific relevance here.

In the shorter, 'hard news' articles, that is articles which reported on specific events, the article structures are generally characterised by a terseness and directness, or what could be called in colloquial terms a matter-of-fact style. A notable exception to this is the reporting of iPads being given to sumo wrestlers, covered by both *BBC News* and *The Metro*. While generally direct and to the point, they both have a humorous slant, making light of the problems sumo wrestlers face trying to use normal telephone equipment. These 'fat-fingered sumo wrestlers' (*BBC News* 2010) are given iPads which are 'easily prodded' (*BBC News* 2010). The largeness of the wrestlers is emphasised by its placement in the headline and its syntactical positioning at the beginning of the sentence in the adjectival form 'fat-fingered'. *The Metro* (2010), meanwhile, makes it clear in the headline that the use of 'fat finger' is a quotation, through the use of inverted commas in the headline, though it is not attributed to any source. In spite of this, the article later refers to sumo wrestlers as 'roly-poly grapplers', an example of the employment of assonance, a kind of rhetorical style that marks the article as unserious, something that will be explored in more detail in the subsection on rhetoric and meaning below.

In many articles, the entire population of Japan is reduced to 'the Japanese' or 'Japan' and as such they are treated as a collective entity, all behaving in the same way. In some articles, specific demographics of Japan are highlighted as being fax users, such as the elderly or businessmen, meanwhile others attribute the use to the country as a whole, as demonstrated by the frequent employment of the possessive pronoun 'their'. In the *BBC News* article from 2005, the journalist discusses the difficulties she had in arranging interviews, and exaggerates the difficulties with a few Japanese to represent the whole nation, which is achieved through the deictic 'they' or 'their':

'no amount of further reassurance will change their minds'

'when people do agree to give you an interview they go to great lengths'

'they give you so much time and are so generous once they agree'

The employment of the pronoun 'they' is often coupled with the pronoun 'you', as can be seen in the examples above, and this syntactic decision emphasises the differences between the Japanese and the intended audience of the article. Throughout the aforementioned *BBC News* article, the journalist addresses 'you' and explains how 'every day there's something to astonish you in Tokyo' and that eventually 'you reach a point where you can't absorb any more'. The intended audience is revealed in this usage to be a non-Japanese, probably British, and the 'fascination' that 'you' will find in Japan reduces the country to a spectacle, reinforcing the Orientalist notion of the East as a source of pleasure for the Western observer. This is an instantiation of the *us* versus *them* dichotomy described in van Dijk's ideological square: the negative aspects of the Other are emphasised, in this case their difficultness and their 'varying degrees of no'. The ideological square suggests that positive aspects of *us* are emphasised, but in this example these positive aspects are left unwritten, and it is left for the reader to make inferences: in Japan it is difficult to arrange interviews because of the culture of 'reserve and politeness', but the implication is that in Britain it is not so difficult to arrange interviews, because the British do not have this reserve. The *you* or *us* versus *them* dichotomy is an example of rhetoric and will be explored in more detail in the next subsection.

Rhetoric & Meaning

Rhetoric refers to the use of language techniques or rhetorical devices within a text, such as metaphor, rhetorical questions, and particularly for van Dijk, the divisions of *us* versus *them*. As the examples below demonstrate, the specific use of language is not neutral, but is informed by social and cultural norms, assumptions and stereotyping (Richardson 2007, 14).

'Japan has been slow to catch on to the potential of so-called e-commerce' *BBC News* 2000
 'secretaries still observe time-honoured protocol' *The Independent* 2013
 'Japan is obsessed with hard copies' *BBC News* 2012
 'Japan's failure to ditch its analogue habits' *BBC News* 2015
 'why Japan refuses to enter the 21st century' *The Independent* (online) 2013

The rhetoric of the examples above bestows a sense of backwardness on Japan, marked by the common use of the word 'still', present in many of the articles. Japan is locked in the past, as is evident from their adherence to 'time-honoured protocol' in their 'analogue' world. In explaining this backwardness, Japan is characterised through language indicating its stubbornness: 'failure to ditch' and 'refuses'. Not only is Japan stubborn, but it is 'obsessed'. There are two distinct semiotic factors at play

here: firstly, in terms of transitivity, Japan is presented in terms of resistance. In the choice of the word 'refuses', there is the connotation of capability—Japan is more than capable of ditching its 'analogue habits' and entering the '21st century', but it will not. Secondly, the idea of 'the 21st century' works on the underlying assumption that a prerequisite for entering the 21st century is the abandoning of the fax machine. In some cases, Japan is described using infantile imagery, emphasising this stubborn refusal: the only way the Japanese will moved forward is if there is a way to 'wean' them off it (*The Independent* 2013). As such, the foreign journalist, and by extension, the West, is positioned as the parent, through patronising descriptions of the country's behaviour as 'endearing'. Indeed, as the below examples show, Japan is frequently described as something that is interesting, if confusing, to observe:

'one of the world's most vibrant – and often baffling – cities' *BBC News* 2005
 'every day there's something to astonish you in Tokyo' *BBC News* 2005
 'daily life in Japan is fascinating' *BBC News* 2005
 'the area is a model of suburban sanitised comfort' *The Guardian* (online) 2003a
 'the famously baffling metropolis' *The Guardian* (online) 2007a
 'befuddled gaijin' *The Guardian* (online) 2007a
 'another fascinating place is Harajuku, a really exciting area' *The Telegraph* (online) 2008

Through this language, Japan is thus Othered. Following the Orientalist pattern of marking the Oriental country as being different, Japan's differences are exaggerated to the point of being completely unfathomable – in not one, but two separate articles in different sources Japan is described as 'baffling'. It is baffling because it is not the same as the journalist's own culture, which is considered normal and understandable. Language of difference is found throughout the texts, and many of these play on the country's relationship with technology:

'yet in Japan, a country with a hi-tech reputation, the fax is thriving' *BBC News* 2012
 'Japan is a country known to be high-tech but not everyone is' *BBC News* 2012
 'why is hi-tech Japan using cassette tapes and faxes?' *BBC News* 2015
 'Japan has a reputation for being fascinated by robots and hi-tech gadgets' *BBC News* 2015
 'despite the tech-loving public image' *BBC News* 2015
 'Tokyo may be the global capital of electrical wizardry, but it – and the entire Japanese archipelago – is a backwater when it comes to natural energy resources' *The Guardian* (online) 2003a

Common amongst many of the articles about 'old' technology in Japan is a rhetoric of playing upon the audience's assumed expectations of Japan as 'hi-tech' (something

discussed in the subsection on meaning above). Sentences begin with a clause explaining the typical image of Japan, before following it up with a contradictory image that the journalist claims to be the actual case. Articles often use language to evoke surprise from the audience, even going so far as to say that it is surprising. The predicate of 'hi-tech Japan' and the assumption that this is the reality that most believe is used to frame rhetorical questions, such as that in the extracts above. These questions prepare the audience to accept that Japan is in fact not hi-tech and to accept the answer and authority of the journalist. The explanations given in articles draw on a range of ideas, often appealing to Japanese tradition and culture, as shown below:

'there's another side: the ancient spiritual Japan of temples, landscape gardens and geisha' *BBC News* 2005
 'the ancient sport' *BBC News* 2010
 'there are two types of Japanese consumers: those who are very high-tech and others who are still wedded to traditional forms' *BBC News* 2012
 'weird mix of old and new in Japan's sprawling capital city' *The Telegraph* (online) 2008
 'Japan's ancient sport of sumo is embracing the latest technology' *The Metro* (online) 2010

As well as the references to ancient temples alongside the skyscrapers of Tokyo, some articles position the fax as equally antiquated, referring to it as 'dusty' and 'clunky'. The reference to 'time-honoured protocol' (*The Independent* 2013) in one article plays on this sense of ancient tradition, as if the receiving of a fax and taking the printed document to the intended recipient were a ritual as ancient as a Shinto practice. Discussion of technological Japan places it within the context of a dichotomous Japan: on the one hand it is a high-tech country, typified by the Tokyo metropolis, while on the other it is an ancient and traditional country, as shown by its temples, by geisha and so on. Often the rhetoric is precisely this: of a dichotomy. This returns us to the language of confusion expressed in some of the articles: these two sides of Japan are 'weird' (*The Telegraph* 2008). The notion of weirdness is reliant on an understanding of what is *normal*. The language here relies on these unwritten assumptions explored in the previous subsection, the assumption being that normal is the culture and the society of the audience, i.e. the British. Japan is characterised by its differences to, assumedly, Britain, and because it does not follow British norms, it is therefore weird. In discussion of faxing in Japan, the rhetoric of difference is expressed in cultural terms:

'the culture of handwriting is firmly rooted here' *BBC News* 2012
 'difficult in a culture where devotion to one's employer is the norm' *BBC News* 2015
 'many Japanese still prefer handwritten over typed documents' *The Independent* (online) 2013

Culture is discussed in a few articles, such as the explanation for faxing that handwritten documents are preferred in Japanese culture, due to a perceived culture of letter-writing and calligraphy (*BBC News* 2012; *The Independent* 2013). The appeal to a traditional, cultural element is typical of Orientalist discourse, which situates Eastern countries as being stuck in the past. Indeed, one of the 'systematic' differences between the East and the West is that the East is 'undeveloped', compared to the developed (and superior) West (Said 2000b, pp. 104f). In one article (*The Independent* 2013), Japan is presented as 'refusing' to 'enter the 21st century'. The implication here is that by not abandoning fax machines and adopting technology perceived as modern, Japan is not in the 21st century and is therefore stuck in the past.

Distinctions between the British norm and the Japanese Other are not always implicit. Indeed, other articles emphasise the difference through the employment of a rhetoric of 'us' versus 'them'. This ties into Orientalism, the core of which is the emphasis of difference between the East and the West, with the West positioned as the superior, more advanced civilisation (Said 2000b, 104). The discourses of Orientalism are strong in this article from *BBC News*, where the right way of doing things is set up against the Japanese way of doing things. For example:

'this is a country that uses people to do the work of traffic lights and where big-name companies running 10-year-old software is the norm' *BBC News* 2015

The underlying assumption in this sentence is that having people guide traffic is not the norm, the reason being because *we* do not do it. The *us* versus *them* dichotomy is manifest in a number of ways within the language of the texts, as exemplified in the examples below:

'no amount of further reassurance will change their minds' *BBC News* 2005
 'the locals had a uniquely Japanese answer to the problem' *The Guardian* (online) 2007a
 'they have a mad scene at the weekend which sees all the young Japanese dress up as Goths and punks and parade down Takeshita-dori' *The Telegraph* (online) 2008

Japan is shown to be irreconcilably different, particularly in the use of such terms as 'uniquely'. The last example from *The Telegraph* re-emphasises the weirdness of Japan, describing the 'mad scene' at Harajuku wherein young people can be seen in

all manner of fashions. The language presents this as completely alien, despite many countries having areas known for being the haunts of fashionable youths, such as Camden in London. Moreover, the final example describes the Japanese as ‘dressing up’, once again reaffirming a childish imagery of Japan. There is also a sense that their dress sense is not genuine as they dress ‘as’ goths and punks, employing the rhetoric of simile: they are *like* goths and punks, but they are not. This is reinforced by the use of ‘parade’ which suggests a performative aspect to their dressing-up: that they are a spectacle to be watched, and are wearing these clothes for the benefit of others, in this case the foreign tourist.

Up until now, this subsection has mostly focussed on the specific use of language in the texts, but in CDA, what is left unsaid is just as important as what is written, and many articles contain unwritten assumptions or presuppositions: what is assumed to be common knowledge or an accepted truth and thus not requiring exposition. This is particularly true when it comes to considering what the norm is.

In many of the articles, there is an assumption that the reader will typically imagine Japan as being high-tech, this is evident from the tone of surprise established in articles about fax-using Japan. In the following examples, the idea of Japan being high-tech is introduced, but it is not supported with any real evidence:

‘yet in Japan, a country with a hi-tech reputation, the fax is thriving’ *BBC News* 2012
 ‘Japan is a country known to be high-tech but not everyone is’ *BBC News* 2012
 ‘why is hi-tech Japan using cassette tapes and faxes?’ *BBC News* 2015

Here the articles rest on the assumption that the audience will hold the same view as them and that it will not be questioned. The juxtaposition of the high-tech expectation versus the low-tech reality is dependent on the audience having a specific, stereotypical depiction of Japan. The journalist then plays upon this stereotypical depiction by either subverting it, or reaffirming it by referring to other stereotypical depictions of Japan, such as the ‘culture where devotion to one’s employer is the norm’ (*BBC News* 2015). Again, this reference to the ‘norm’ assumes that a norm exists, and if it does, the norm is that of the assumed audience, in this case a British one.

Review

To sum up, CDA emphasises the importance of the discursive and social practices in which the text is placed, and one of the questions that must be asked is: could this article have been written at another point in time? Indeed, in the subsection on schemata, it was shown that argumentation has changed as in the early 00s fax was

still considered a normal technology in Britain, and references to fax use in Japan was written with unmarked language and was fully compatible with the high-tech image of Japan. Over time, the fax machine has become less common as a business tool in Britain, or at least less visible, which has ultimately led to the counter-image of Japan being outdated for its continued use of fax machines, beginning with the *BBC News* article in 2012, and, at the end of the sample, another *BBC News* article in 2015.

While the discourse is not necessarily anti-Japanese in these articles, many take the opportunity to find humour in the situation. The majority of the titles of the more recent, fax-centric articles are fax-based puns, marking the stories as not being serious. In addition, journalists choose to exaggerate the Japanese attitude towards faxes for effect, speaking of 'reverence' and 'love', rather than focussing on rational, objective reasons for the technology's continued success. Of the articles that specifically write about faxing in Japan, many express surprise at the situation, which would indicate that this is not the typical image people hold of Japan. Interestingly, while it may not be the typical depiction, it nonetheless relies upon an appeal to known stereotypical knowledge and assumptions.

While it is possible to analyse a text for stereotyping and Orientalist discourse and assumption, it is not enough to say that the claims made are necessarily wrong. News articles may well be exoticising Japan through their portrayal of it as a faxing nation, but without empirical evidence, there is nothing to say that the basic claims about Japan's level of fax use is factually inaccurate. This brings us to the third subsidiary question: are contradictory stereotypical depictions supported by evidence? CDA cannot prove this and is therefore not a sufficient research method in isolation, and needs to be combined with other methods, too, as the methodology chapter (Chapter 3) explained. Thus, the second part of the case employs interviews with a sample of companies in Japan as well as observation of use at companies, and in electronics stores, where faxes are sold, in order to assess whether these claims can be evidenced.

Section Two: Observation & Interviews

According to the articles analysed above, fax machines are a commonly used method of communication in Japanese business, resulting from a combination of Japanese culture and an active refusal to part with the technology. If these articles rely on stereotyping and Orientalism, as the analysis shows, however, then to what degree is

this depiction an exaggeration, or a stereotypical depiction? In order to assess such use of fax machines in Japanese companies, several avenues were undertaken.

Firstly, research was carried out into what data already exists in terms of fax consumption in Japan. Official sales figures, government statistics and surveys of the public are all useful for creating a comprehensive image of the situation in Japan. Secondly, existing studies of Japanese office technology use were sought, as well as any literature pertaining to fax use in Japan. Since the fieldwork took place at the end of the news sample timeframe (2015), these statistics allow for the author to account for the fourteen years that could not be observed directly.

Coopersmith's 2015 book, *Faxed: The Rise and Fall of the Fax Machine* suggests that between 2000 and 2009, Japanese fax machine manufacturers 'produced over 100 million machines in a flow of innovative new models' (2015, 214). Coopersmith notes that it was only towards the end of this period that fax usage visibly began to decline, giving the example of decreasing fax usage at convenience store chain, 7-Eleven (2015, 204). In 2012, Japanese Cabinet Office statistics said that 59% of Japanese homes have a fax machine (Harlan 2012), coinciding with the *BBC News* article of that year (*BBC News* 2012).

The Communications and Information Network Association of Japan provides useful information regarding the import and export of fax machines. Figure 4.1 below shows the changes in imports and exports of fax machines between 2012 and 2015:

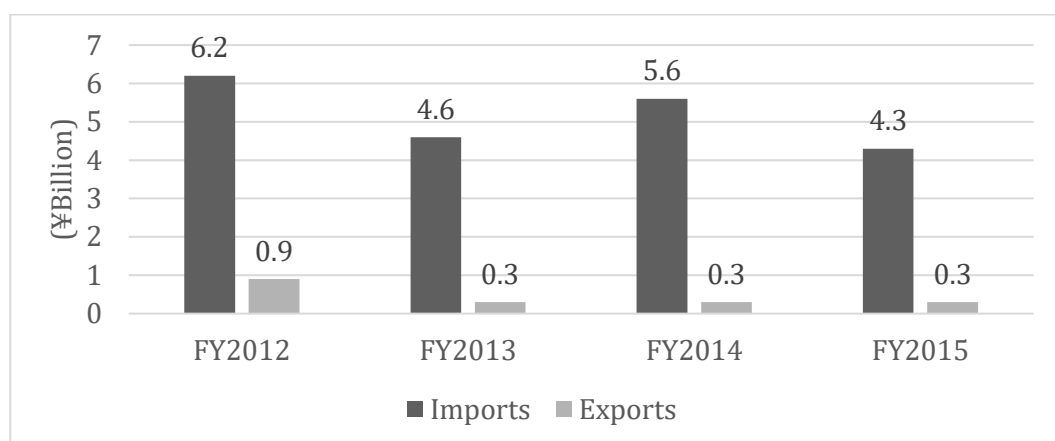


Figure 4.1 Trends in Fax Machine Imports and Exports in Japan, 2000-2015 (CIAJ 2013; 2014; 2015; 2016)

As the table shows, exports of fax machines from Japan have been consistently low, indicating that the market for the technology abroad is negligible. Indeed, taking the financial year 2015 as an example, exports of telephony equipment were worth a

total of 5.4 billion yen, of which fax machines made up only 0.3 billion yen (CIAJ 2016). The table also shows that, while fax imports fluctuate, there is continued demand for the device. Of the total telephony imports, however, much like in the case of exports, fax machines represent only a fraction of what is imported, in financial year 2015 accounting for 4.3 billion yen of the 1.765 trillion yen total (CIAJ 2016).

While these statistics are useful, sales are not necessarily a useful indicator for fax use, since fax machines do not need to be regularly replaced once bought. Nor is a dedicated unit necessarily required, since fax functionality can be found in printers and desktop computers. Moreover, while exports of fax machines are demonstrably low, this does not prove that fax machines are not used globally for two reasons: firstly, for the above reason that fax machines do not need replacing regularly once bought, and secondly, the statistics can only account for fax machines produced in Japan for export, and therefore do not account for Japanese brand fax machines produced abroad or non-Japanese brand fax machines, such as Xerox (Xerox 2018), Lexmark (Lexmark 2018) or HP (HP 2018).

The very premise of the news articles about fax in Japan rests upon the assumption that fax is used nowhere else, especially not in somewhere like the UK. But how true even is this? The articles cite no comparative data to prove that fax machines have been abandoned in other countries, including the UK. The assumption that fax machines are no longer used is thus based solely on the journalists' own experiences, or rather, lack of experiences with faxing. The issue here is that, while journalists in the UK may not use fax machines in their jobs, this does not automatically mean that they are not used in any other industry either. Indeed, in 2012—around the time the articles first started to appear—marketing research company Opinion Matters carried out a survey of US and UK businesses on the role of faxing within companies on behalf of IT company GFI Software. The survey found that of the 1,008 US office workers that responded, 85% still used faxing, and of the 1,005 UK workers, 74% used fax machines (Kelleher 2012). According to a 2017 study by market intelligence firm International Data Corporation (IDC), a global survey of 200 companies found that across the world reduction of fax use was low, and in fact, on average more companies had seen an increase (IDC 2017), as can be seen in Figure 4.2 below.

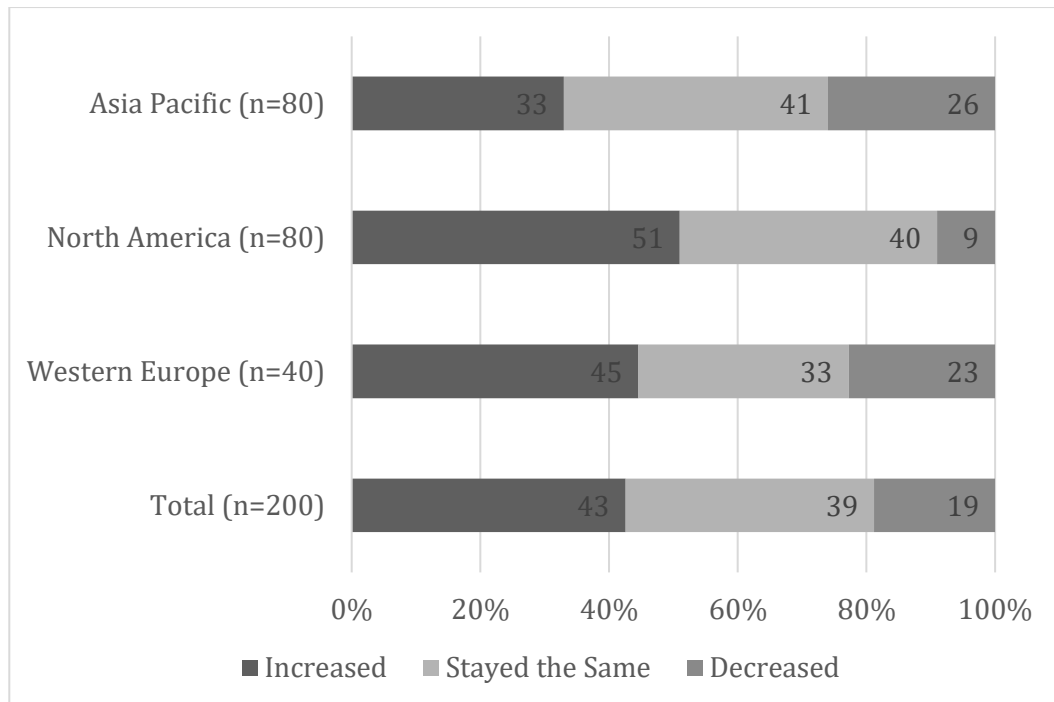


Figure 4.2 Fax Usage Compared with the Previous Year (2016) by Region (IDC 2017)

Furthermore, this same study found that on the whole fax usage was expected to grow, rather than decline, based on the views of employees at the sampled companies (IDC 2017). Interestingly, it can be seen from Figure 4.3 below that those surveyed in the Asia Pacific region (which includes Japan) were more likely to see fax usage decline than in North America (38% compared to 13%). This corroborates with a forecast from CIAJ, which predicts that between 2017 and 2022 there will first be an increased demand for telephony equipment (including fax machines, but also mobile phones and home phones), and then a drop, since these devices do not need frequent replacement, before demand increases again towards 2022 (CIAJ 2017). The report notes that demand for fax machines will remain moderate in Japan, but the devices have long replacement cycles and are seeing reduced frequency of use (CIAJ 2017).

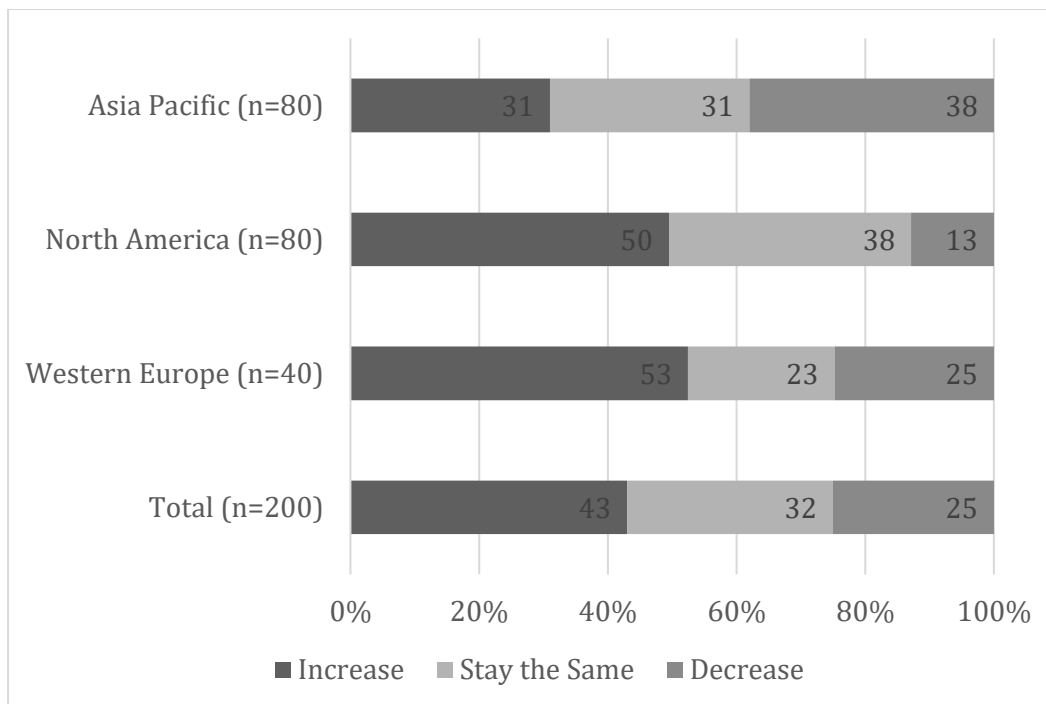


Figure 4.3 Expected Growth of Fax Usage by Region From 2017 Over Two Years (IDC 2017)

In addition, faxing does not solely refer to documents sent directly between machines over a phone line; it also includes Internet Fax which works much like email and does not require a dedicated fax machine. While almost indistinguishable from email, Internet Fax has the benefit that faxes sent in this manner can still be sent to a standard fax machine. Today, there are many companies offering Internet Fax solutions, such as dedicated fax servers to handle the conversion of a faxed document to PDF and vice-versa, as well as the storage of high volumes of faxes. A market research report by Davidson Consulting predicted that the market for Internet faxing would grow to \$455 million by 2017 (Davidson Consulting 2013). Of the 41 fax server vendors and 8 fax board vendors profiled in the report, over half are companies headquartered in the US, while the rest of the sample includes companies in Europe, Israel and Turkey (2013). Interestingly, no Japanese Internet fax service is profiled, though this could be a result of a language barrier since many Internet fax vendors position themselves as international, with English as the primary language on their website, whereas Japanese vendors tend to have a domestic focus. Though by no means conclusive, these reports demonstrate that the continued use of faxing is by no means unique to Japan and is not even necessarily an uncommon practice in other countries.

Observation

Following this preliminary research, first-hand empirical research in Japan was carried out: while the news articles mentioned several companies that were still using fax, the few mentioned did not amount to an adequate sample. Indeed, although supporting comments from a handful of sources are useful, and adequate for a newspaper article, they do not stand up to any academic scrutiny. In the methodology chapter (Chapter 3), the concept of triangulation was introduced, referring to the idea that the more something is observed, the closer to the truth of the matter we can get. While it is not doubted that the companies interviewed in the articles sampled use fax machines, no real conclusions can be drawn from one or two observations. The fieldwork was thus designed to address this lack of a representative sample of Japanese companies. Through repeated observation and interaction with different Japanese companies, we can come closer and closer to a more realistic image of the state of fax use in Japan.

As discussed in the methodology chapter, fieldwork for this example technology was carried out in October 2015, with the majority of the monthlong trip spent in Tokyo, in addition to visits to Nagoya and Kyoto. For the example technology of fax, fieldwork began by verifying that fax machines were indeed readily available in Japan. This was achieved through observation work carried out at major electronics stores. Although the fieldtrip fell within the timeframe for the sampled articles, it was at the end of the period, so these observations do not reflect the situation between 2000 and 2014. To account for this, however, companies were asked about their fax use, including this use at the time of the first article about faxing in Japan in 2012 (*BBC News* 2012).

While Tokyo cannot be said to be representative for the whole of Japan, as the country's centre for business and commerce (Invest Tokyo 2018), if articles suggest that faxing is common in Japan as a whole, then the expectation is that even in Tokyo this would be the case. Moreover, according to the 2010 census, 90.7% of the Japanese population live in metropolitan areas, as much of the population has moved away from the countryside (MIC 2010). During a visit to Akihabara, a district of Tokyo, well known for its numerous electronics stores, observation was carried out at a branch of popular electronics store chain Yodobashi Camera. The department store specialises in electronics and has a sizeable home fax machine section.

The Akihabara branch of Yodobashi Camera is known for its size, being the second largest in Japan, with a sales floorspace of 23,800 square metres (Nikkei XTech 2005),

so smaller branches around Tokyo were also visited. In these, too, there was a wide selection of fax machines on offer, from well-known brands such as Panasonic and Sharp. The displays for these machines featured large, colourful text highlighting their features and advantages. Of the machines on display, many had selling points in common: they could block unsolicited numbers, they had large buttons and easy to read screens, they were easy to use.

This in-store advertising for the fax machines also gave an indication as to the main demographics targeted by manufacturers and retailers: housewives and the elderly. Figure 4.4 below features cartoon images of a housewife in a stereotypical apron, the advertising promoting the cordless handset included with the unit, which allows the housewife to get on with her jobs while also using the phone.



Figure 4.4 Fax Machine Marketing Targeting Housewives

Similar imagery can be found in Figures 4.5 and 4.7, although some machines use photographs of actors to appeal to the demographic (Figure 4.5). What is common across all of the marketing material is that there are no images of men, with the exceptions of cold callers and policemen, representing the security features of the fax machines. The emphasis of women, young and old, in the displays indicates a clear target audience for the homefax.



Figure 4.5 Fax Machine Marketing Using Housewife Imagery

This is further emphasised in the device features highlighted by the manufacturers in Figure 4.6 below: the cordless handset, the ability to read faxes on the screen and a voice guide to avoid any difficulty in using the device. The large screen, large buttons and voice guide are designed to make the device easier to use by older persons; meanwhile, the cordless handset and a companion mobile phone app are designed to appeal to the busy housewife, as already seen in Figure 4.4.



Figure 4.6 Fax Machine Display Promoting Ease of Use



Figure 4.7 Fax Machine Display Promoting Ease of Use and Employing Housewife Imagery

The observation showed that fax machines are readily available, and this would suggest that fax machines may indeed be common in Japanese households. However, the mere availability of the device does not explain why they are still being used, although the cartoons depicting housewives and the elderly may give some clue. In

order to understand why these devices continue to be sold and used, it was also necessary to carry out interviews, with both the manufacturers of fax machines, and also those using the technology. Unfortunately, because the significance of housewives and the elderly as target demographics for fax machines was only made clear during the observation part of the fieldwork, interviews with these two groups could not be arranged within the period of fieldwork. Moreover, gaining access to groups perceived as vulnerable, such as the elderly, is not only difficult in terms of finding potential interviewees or survey participants, but also has ethical implications. However, the advertising in electronics stores demonstrates an awareness on the part of the manufacturers of how important these demographics are, and so questions relating to key demographics were built into the interviews.

The selection of a company was a highly important factor and a number of criteria were taken into consideration. The first criterion was the industry chosen. The investigation of a company in the finance & banking sectors or the legal sector may not have been fair simply because those sorts of companies *must* use fax machines for legal reasons, and this is the case in many countries. In order to build a representative sample, a number of companies were selected from across a broad range of industries, providing a mix of companies, all with different IT uses and requirements. Furthermore, the company size was to be taken into account (the number of employees, the affordability of upgrades for the company). While many people may think of large multinationals like Sony or Toyota when it comes to Japanese companies, over ninety-nine per cent of businesses in Japan are SMEs, that is, companies with fewer than 250 employees (Economist Intelligence Unit 2010). Thus, for a study of typical technology use in Japanese companies, it made sense to interview 'typical' Japanese companies, i.e. mostly SMEs. As stated above, companies were drawn from across a broad range of industries, ranging from small printing firms to IT consultants. The sample was purposive, companies specifically selected so as to ensure as diverse range of responses as possible. Companies were contacted via email, through introductions, and through snowballing (Atkinson & Flint 2001, n.p.), as explained in the previous chapter. During initial contact, the objectives of the study were clearly laid out as well as information regarding the importance of confidentiality. In the cases where there was no introduction, as this was the email equivalent of cold calling, responses were understandably varied, with many messages receiving no response. The significance of this lies with those who did choose to reply, specifically those who were willing to participate in the study. While

it is an unavoidable situation, since interviewees must necessarily agree to partake in the study, one must consider the possibility that the companies that are willing to participate in the study have a degree of bias. However, in this case, since interviews were anonymised, it was determined that companies would have no specific motive for agreeing to interview. A summary of the interviews conducted, including medium, question format and length can be found in Appendix 3.

In total, thirteen interviews were carried out, split between two categories of interviewee. The first category concerned manufacturers of fax hardware, and interviews were carried out with two manufacturers of both household and office equipment, and one manufacturer of office equipment. The purpose of these interviews was to gain insight into the importance of fax hardware production for the manufacturers themselves and also get a better understanding of the current fax market and the strength of sales. Moreover, these interviews sought to determine the extent to which depictions of fax use in Japan relied on stereotypical knowledge and whether these depictions can be evidenced.

Questions asked to fax manufacturers fell into three categories, namely:

1. The market for fax
2. The appeal of fax
3. Fax, present and future

The first category relates to questions aimed at ascertaining just who buys fax machines in Japan, at both consumer and business levels. Since it would not have been possible to gain access to sufficient numbers of housewives and the elderly (the perceived demographic, based on in-store advertising, as found in observation) to survey them, questions were instead posed to the manufacturers, appealing to the manufacturers' own market research. These questions explored how manufacturers target particular demographics, and the specific marketing strategies used. The second strategy concerns the reasons, in the opinion of the manufacturers themselves, for the reported enduring popularity of the fax machine. Manufacturers have to make their products seem desirable, and often tout features or qualities they think consumers will find appealing. Thus, these questions also overlap with the marketing for fax machines in Japan. Lastly, the third category deals with questions about the state of fax technology in Japan: is it being constantly developed and improved? What future does the technology have? There is only so much the manufacturers themselves can tell us about the state of faxing in Japan; while they

provide the hardware, its ultimate use is left up to the end user, thus necessitating the purposive sampling of Japanese companies for interview.

While news articles did mention the role of the elderly in the retention of faxing, the main emphasis was on businesses as an explanatory factor for faxing in Japan. The extent to which the homefax market plays a role in the persistence of the technology was only revealed during the observations, described above. Consequently, the second set of interviews were interviews with a sample of Japanese companies, from a variety of different industries, on their use of fax in day-to-day operations. Ten such interviews were carried out, eight of which were with SMEs, which make up 99% of companies in Japan (Economist Intelligence Unit 2010). The remaining two interviews were with a multinational construction firm and a major national newspaper, in order to provide representation for large scale companies in Japan, which while accounting for only 1% of companies, are the global face of Japanese business. Here, the aim was to assess the degree to which fax machines are in fact used in Japanese companies, based on the depictions found in news articles.

Of the ten interviews with Japanese companies, eight were arranged by 'cold emailing' companies, using contact details readily available on their websites. The remaining two interviews, those with Company 2 and Company 3, were obtained via snowball sampling—sometimes called a referral sampling—a method in which research participants recruit future subjects. This method is often used in situations where access to potential participants can be difficult (Atkinson & Flint 2001, n.p.). While this method is often discussed in relation to accessing members from marginalised communities or those engaged in illegal activities, for example, Japan is notoriously difficult for researchers to gain access to participants and interviewees (Culter 2003, 219). Researchers are often recommended to have a point of contact within a company who can arrange an introductory meeting. An in-person introduction is considered not only polite, but necessary before any kind of interaction can occur. Thus, emails are not always enough to secure an interview, and are only a preamble to an actual introduction. In this case, initial emails asked only for an introduction, with full disclosure of the author's intent to later ask for interview. Responses, as mentioned above, were low, even negative ones, and so the interviews arranged through snowball sampling were an invaluable addition.

In devising the interviews, again the questions were designed to address the extent to which newspaper articles' depictions of fax can be demonstrated empirically, or

whether they largely relied on stereotypical knowledge. The questions were structured around three main categories, these being as follows:

1. The company's use of fax
2. Fax in relation to other technologies
3. Fax's appeal, necessity and future

The choice of these categories as the basis for the structuring of the interviews was based on determining the fax's position within Japanese companies and Japanese technology use in a wider context through a consecutive and progressive line of questioning: how often do you use fax in the company? Why not use email instead? Does fax have any advantages? Can you see yourself moving away from the technology? Each question was designed to feed into the next and categories ordered so as to proceed from one to the next. Of course, even though the interviews were framed around a list of set questions which were intended to be asked sequentially, an in-person interview is also a conversation, and conversations rarely follow such a restrictive and mechanical pattern. While interviews were broadly kept to the structure intended, interviewees would segue into other, related topics or even those planned for a later question, and so questions would be asked at a 'natural' point in the conversation.

With the exception of three interviews (see Appendix 3), interviews were carried out in person at the businesses' offices. In keeping with semi-structured interview practices, interviews also made allowances for spontaneous questions, prompted by answers made by the interviewees. Moreover, since interviews were carried out with companies of vastly different industries, not every question could be asked to every interviewee. While a general set of questions was employed for every interview, additional questions were tailored for specific interviews, taking into account potential differences between industries. While different, these kept within the defined categories and broader line of questioning. This set of general questions asked to all companies can be found in Appendix 3. In addition, each interview was treated as a formative exercise in interviewing and subsequent interviews were a refinement and improvement upon the last. This was only natural, for as a PhD student, the study is not just the research as the end-product, but the cumulative experience and training as a researcher.

Interviews with Fax Manufacturers

The first set of interviews was with manufacturers of fax machines, the purpose being to establish the importance of fax technology in Japan from the perspective of the companies producing it. Two fax manufacturers consented to in-person interviews, a manufacturer of both personal and business machines, and a manufacturer of business fax machines, while the third manufacturer, which makes both personal and business machines, agreed to answer any question via email. Interviews are necessarily subjective, and the kind of information obtained will vary, depending on the seniority of the interviewed staff, and the depth of information obtained will depend on the amount of time granted for the interview. To mitigate some of these problems, interview questions were sent in advance, so that answers could be prepared by the interviewee, including any information gathering that would need to be carried out on their part in order to have the information to hand. See Table 4.1 for additional information about the interviews, including medium and length.

Fax Manufacturer 1 (FM1)

This interview was a group interview carried out with various representatives, with different knowledge, as well as interns. This manufacturer is one of the biggest producers of personal and business fax machines in Japan and worldwide. Despite this, by the time of the interview in 2015 the manufacturer had in fact discontinued the production of standalone fax machines, as fax functionality is now incorporated into multifunction printers, in both business and home models (Fax Manufacturer 1 Interview 2015). Checking the manufacturer's website reveals that the last standalone fax machine to be sold was released in 2012.¹¹ The interview revealed that there was no real market for a dedicated fax unit, suggesting that its importance in the workplace has diminished (Fax Manufacturer 1 Interview 2015). Indeed, when asked about the importance of faxing in Japan, it was said that the Japanese fax market was no larger than in other countries, and exports of fax machines to other countries are far greater than domestic sales, which account for approximately only twenty per cent of sales (Fax Manufacturer 1 Interview 2015). This would confirm the findings of the IDC study of global fax usage discussed earlier, which showed that fax use had increased or stayed the same worldwide (IDC 2017).

¹¹ In order to maintain the interviewee's anonymity, a citation cannot be given as this would reveal the manufacturer's name.

One of the purposes of these interviews was to ascertain the target demographic for fax machines in Japan, including how manufacturers market the products. This company advertises its fax machines in a variety of media, including television, magazines and newspapers. However, there is no specific demographic that is targeted by the company when it comes to home models (Fax Manufacturer 1 2015).

Fax Manufacturer 2 (FM2)

This interview was a group interview, with two representatives from the company. The second manufacturer, which specialises in units for business use, offers only one standalone fax machine model, as fax functionality is incorporated into their multifunction units (Fax Manufacturer 2 Interview 2015). The company no longer actively develops fax technology, the standards being the same for the last 20 years at least. Fax can thus be thought of as just another feature and not necessarily a selling point. Within the company itself, fax is not used very often for communication. The two representatives interviewed explained that this may be more to do with rank than anything: within the structure of the company, lower level employees communicate for the most part via email, suggesting that faxing is reserved for those higher up (Fax Manufacturer 2 Interview 2015).

Fax Manufacturer 3 (FM3)

The third manufacturer, which produces machines for both individual consumers and businesses, was interviewed over the course of several emails. According to the interviewee, fax machine sales are on a downward trend (Fax Manufacturer 3 Interview 2015), and as a result there are only three main fax manufacturers in Japan (of which FM1 and FM3 are two). The company targets their products at individuals and small businesses. Among individuals, the main targets are those aged forty and older, as those younger will be of the 'smartphone generation' (Fax Manufacturer 3 Interview 2015). The company advertises on TV, radio, newspapers, magazines and on train advertising screens, but to target those aged forty and onwards the main focus is on the radio and select magazines. Throughout the interview, the interviewee regularly compares fax machines to smartphones, indicating that it is these that are killing the fax machine: people do not need faxes when they have a smartphone that can do everything (Fax Manufacturer 3 Interview 2015).

Coding and Analysis of Manufacturer Interviews

Following the system of open coding introduced in the methodology chapter (Chapter 3), the answers given by the interviewees have been collated in Table 4.2, below. First, the data has been broken down into important ideas, events or objects, and are listed as identifiers under the heading 'responses'. These first identifiers use the same wording as in the interview and are known as 'in vivo codes' (Glaser & Strauss 1967; quoted in Khandkar 2009). Responses have been attributed to the interview they came from in parentheses, and it can be seen that often interviewees make the same point. Key themes are highlighted in this way in order to transform the large volumes of data that arise from in-person interviews into manageable explanatory categories. Answers have been grouped by the three categories or lines of questioning established above, with example questions given in the left-hand column.

Line of Questioning	Responses	Coding
The market for fax <ul style="list-style-type: none"> • Who is the fax machine for? • How are demographics targeted? 	No market for dedicated units (FM1) Diminished workplace importance (FM1, FM2) Target demographic of individuals (FM1, FM3) Target demographic of individuals aged forty and above (FM3) Target demographic of (small) businesses (FM1, FM2, FM3) Japanese market accounts for only 20% of sales (FM1) Marketing across variety of media (FM1, FM3)	Shrinking market Reduced Development Older demographic Diminished importance Other markets beyond Japan
The appeal of fax <ul style="list-style-type: none"> • What advantages does the fax have? 	Communication tool within higher ranks of company (FM2) Smartphones replace the need for faxes (FM3)	Fax for important communications only Fax being replaced by newer communication tools
Fax, present and future <ul style="list-style-type: none"> • Is fax technology still being developed? • What is the future of the technology? 	Standalone fax machines are no longer in development (FM1, FM2) Fax functionality is incorporated into multifunctional units (FM1, FM2) Downward trend in sales (FM1, FM3)	Reduced Development Fax as an additional feature Diminished importance

Table 4.2 Preliminary Coding of Fax Manufacturers' Responses

The next stage of coding is to define the categories in which the concepts fit, based on the common properties shared between the concepts (Khandkar 2009). The right-hand column, 'coding', describes the initial list of categories that broadly encompasses the concepts that emerged during the first stage of open coding. Responses will now be compared along the lines of questioning established above.

The market for fax

All three interviewed companies indicated that fax machines were not considered a key technology. Indeed, FM3 admitted to declining sales of the machines, and dedicated fax machines have been replaced for the most part by multifunction units which include a fax function (Fax Manufacturer 3 Interview 2015). Interestingly, FM1's assertion that Japan was not a standout market for fax machines was particularly telling as it would suggest that there are other countries using faxes more than Japan, though the interviewee could not provide details (Fax Manufacturer 1 Interview 2015). FM3 said that home models were specifically targeted towards older consumers (Fax Manufacturer 3 Interview 2015). It is possible to infer from the interviewee's reference to the 'smartphone generation' that the key fax demographic is one that is not necessarily *au-fait* with the latest technology.

The appeal of fax

Appeal seems to lie mostly with an older demographic, as emphasised by FM3 (Fax Manufacturer 3 Interview 2015), echoing the findings of the observation, which showed that in-store marketing material for fax machines targeted the elderly and housewives. The interviewee from FM3 explained that this was because fax machines were of no interest to younger people (which the interviewee identified as those under forty), who were more familiar with smartphones (Fax Manufacturer 3 Interview 2015). In addition to demographic appeal, the comments by the interviewees from FM2 would suggest that faxing possesses a perceived formality: it is not used for general communication by lower level employees, but rather is reserved for those of a higher ranking to communicate (Fax Manufacturer 2 Interview 2015). In general, the interviews would indicate that faxing has lost its importance as a communication tool, as demonstrated by the fact that manufacturers are not actively developing new fax technologies.

Fax, present and future

That fax has been bundled into multifunction units suggests two things: (i) that fax itself could be around for a while longer, since it is easy to incorporate the feature

into printers; but (ii) that the standalone unit itself will soon vanish. Indeed, only FM3 continues to produce standalone units for home use (Fax Manufacturer 3 Interview 2015), and FM2 only offers one dedicated unit in its range of products (Fax Manufacturer 2 Interview 2015). FM3 associates the decline in fax use with the rise of smartphone use (Fax Manufacturer 3 Interview 2015), indeed the ability to carry around a full computer in one's pocket that is constantly connected to the world has drastically changed the way in which people communicate.

Returning to the open coding carried out in Table 4.2, it can be seen that there was a commonality of responses among the manufacturers, though there were some minor differences, such as key demographics, but this can be explained by the fact that FM2 differs from the other manufacturers in that it only produces units for business use (Fax Manufacturer 2 Interview 2015). The open coding extrapolated key categories from the interviewees' answers, but many of these categories overlap and can therefore be reduced down even further to three main categories of responses, as defined in the table below (Table 4.3):

Coding	Response Type
<i>Diminished importance</i>	Japan is not a standout market Standalone machines are no longer developed Fax as an additional feature Fax being replaced by newer communication tools
<i>Limited demand</i>	Fax used for important communications only Fax being replaced by newer communication tools Older demographic
<i>Fax as a feature</i>	Reduced development Standalone machines are no longer developed Fax as an additional feature

Table 4.3 Final Coding of Fax Manufacturers' Responses

After grouping similar categories together, the final coding established three main categories of responses in the interviews carried out with fax manufacturers: diminished importance, limited demand, and fax as a feature. These interviews would suggest that sales of fax machines are gradually diminishing and being replaced by other technologies. Even though faxing is still being carried out, it is not necessarily on a dedicated fax machine, but rather on a multifunction printer that has faxing built

in. As such, it is unclear whether Japanese businesses are buying the units for the purpose of faxing, or whether they are buying printers for their other functions. Interviews revealed that there is not enough of a demand for dedicated fax machines for the most part, particularly in the case of FM1, where Japan is not even considered the most important market for the devices (Fax Manufacturer 1 Interview 2015). Nonetheless, news articles claim that faxes form an important part of Japanese business, so how true is this? Raw sales are not necessarily evidence to the contrary, since companies could still be using fax machines they have had for years. The next section concerns interviews with companies on their actual fax use.

Interviews with Companies

As the beginning of this section suggested, the answers obtained during company interviews did not square with original expectations. News articles were right in saying that Japanese companies have fax machines, albeit they were often right in only a technical sense. Of the ten interviews carried out, only one interviewed company did not have a fax machine. The rest all had fax machines, but as part of a multifunction printer unit, in which faxing is a standard function. The photographs used by the news sources, and the descriptions themselves evoked the sense of businesses stuck in the past, but this was not representative of the offices visited for interviews, which were broadly indistinguishable from an office in any other country.

Table 4.4 below gives a summary of the companies interviewed for the study, their industry and their size. The table includes two columns for statistics particularly pertinent to this study: 'do they have fax?' and 'do they use fax?' While similar questions, the distinction is important and for this reason these were the first two questions asked in every interview. As stated above, all but one of the companies had a fax machine, but this statistic is not enough to make the assertion that Japan is 'fax-loving'. If fax machines are simply built into printers, companies may only have faxes because there is no office printer that does *not* include this function. What then about actual usage? Of the ten interviewed companies, three said that they used fax machines on a regular basis, while another said that it often received faxes for orders. While nowhere near the ubiquity claimed by news articles, four out of ten is still significant. That is, until we look more closely for the reasoning behind their use.

Company	Industry	Size	Do they have fax?	Do they use fax?	Profile
Company 1 (C1)	IT	SME	Yes	Rarely	A small IT solutions company in the Tokyo suburbs
Company 2 (C2)	Construction	SME	Yes	Never	A small construction firm.
Company 3 (C3)	Printing	SME	Yes	Occasionally	A small printing firm in the Tokyo suburbs which produces flyers, posters, business cards etc.
Company 4 (C4)	Marketing	SME	Yes	Frequently	Marketing company that specialises in fax direct marketing (FaxDM), which it utilises in conjunction with other marketing methods.
Company 5 (C5)	Food & Catering	SME	Yes	Rarely	Internet-based business which offers an online ordering system for hundreds of bento shops across Japan.
Company 6 (C6)	Property Lettings	SME	Yes	Frequently	Lettings agent in Tokyo
Company 7 (C7)	IT	SME	Yes	Never	IT consultancy based in Tokyo.
Company 8 (C8)	Construction	LE	Yes	Never	Multinational construction firm with operations across the globe.
Company 9 (C9)	Newspaper	LE	Yes	Frequently	Major national Japanese newspaper.
Company 10 (C10)	IT	SME	No	Never	IT solutions and consulting company.

Table 4.4 Interviewed Company Profiles

Coding and Analysis of Company Interviews

The answers given during the interviews have been coded in the table below (Table 4.5), following the same process of open coding used in analysing data from interviews with fax manufacturers. The first stage of *in vivo* coding is presented below, in which the important ideas or identifiers have been extracted from the interview data. Such codes are presented in the middle column, titled 'responses', and reflect the concepts that emerged during the interviews. In parentheses after the *in vivo* codes are the interviews in which these concepts came up.

Line of questioning	Responses	Coding
Company's use of fax <ul style="list-style-type: none"> Do you still use fax regularly? Do you receive faxes from clients/customers? 	They never send faxes (C2, C5, C7, C8, C10) Use fax daily (C4, C6) Use fax frequently (C1, C3, C9) Use fax to communicate with clients (C6) Receive faxes from clients (C1, C3, C4, C5) The company needs fax (C4, C6)	Purpose
Fax in relation to other technologies <ul style="list-style-type: none"> Why do you choose to fax over phone or email? Would you agree that email is the most convenient form of communication? 	Email is the standard (C1, C2, C5, C7, C8, C9, C10) Email is more convenient (C1, C2, C5, C6, C10) Fax is preferred by some clients (C3, C5, C6, C8*) Fax is preferred by older people (C5, C6) Superiority of paper (C58, C6) Faxes will be seen, whereas emails go unread (C1, C4) Email belongs to a person, fax numbers to a company (C4) Fax can be quicker (C1, C9)	Convenience Aged People Paper Visibility
Fax's appeal, necessity and future <ul style="list-style-type: none"> Does fax have an appeal? Do you think it is a part of Japanese culture? Could you operate without a fax? Is fax usage declining? Does fax have a future? 	Fax is preferred by older people (C3, C5, C6) Fax is simple (C3, C4, C6) Fax is passive (C6) Fax suits Japanese mentality (C6) There is a fax culture (C4, C5) Connection to letter-writing tradition (C4, C5) The Japanese 'read between the lines' and faxing is better for this (C4) Superiority of paper (C1*, C4, C5*, C6, C8) Faxes will be seen, whereas emails go unread (C4) Fax is necessary to the company (C4, C6) Fax is necessary as an emergency contact method (C4) Fax is not used (C8) Fax is already a legacy product (C8, C10) As long as there is a demand, the company will use fax (C5)	Aged people Ease of use Culture Letter-writing Visibility Necessity Purpose Fax is dead Demand

Table 4.5 Preliminary Coding of Companies' Responses

Company's use of fax

The interviews would indicate that fax usage is not nearly as high as news articles claim. While several companies acknowledged to using fax on occasion (see Table 4.5), it was mostly dependent on the industry. Indeed, half of the sample never faxed at all, even though they had fax machines. Those that did fax received more than they sent: receiving faxes from clients, but not using fax to communicate with them. Of the ten companies interviewed, only two considered fax essential (C4 and C6), whereas the other companies reserved its use for specific purposes, such as sending invoices to the bank (C2). Despite this, Japanese companies still appear to be likely to keep open the option of faxing, whether they use it or not.

Fax in relation to other technologies

In the Internet age, there are a multitude of communication methods available to individuals and businesses alike, from email to VOIP (Voice-Over-Internet-Protocol, services like Skype), and services like Dropbox for data transferral. Those companies using fax are potentially using it instead of these other, arguably more commonplace methods, and so the question was posed: why use fax instead of these other means?

This question produced a range of answers, but often it came down to one factor: when fax was simply more practical than email. In the case of the printing firm (C3), faxing made more sense for receiving orders for business cards because there is often more than one way to write a Japanese name, and sometimes the Japanese dictionary on the computer does not have a particular variant (Company 3 Interview 2015). For the newspaper (C9), using a fax machine eliminates the extra steps that would be required to send an email. When preparing a newspaper for print, sending a proof by fax for checking is simpler because to do it by email would require scanning in the page, converting it to PDF and then emailing it. In an industry which works within tight deadlines, a direct method like fax is understandably more appealing (Company 9 Interview 2015). Then there was the marketing company (C4), whose business relies on faxing as they provide a service to clients to send marketing material to potential customers via fax (Company 4 Interview 2015).

Fax's appeal, necessity and future

While the general consensus was that email is by and large superior and more common than fax, fax is perceived as having particular advantages over other forms of communication. Two explanations were suggested by multiple interviewees: ease of use, and tangibility. Using a fax machine requires no specialist knowledge beyond

inserting a document and punching in a number. The simplicity of fax is one of its greatest strengths and explains why it is so popular among its main target demographic: those aged forty plus, and particularly the elderly. In explaining the fax's enduring success, several interviewees stated that its continued use was a direct consequence of Japan's elderly population (Company 3 Interview 2015; Company 5 Interview 2015; Company 6 Interview 2015), who still prefer to use this method as they often do not have Internet access. The second suggested explanation, tangibility, refers to the actual physical existence of the faxed document itself. Multiple interviewees attested to the Japanese affinity for paper documents, a characteristic mentioned in several of the news articles. Many companies in Japan have not gone over to paperless operation and have significant paper trails. For example, during the course of the fieldtrip, several interviews were carried out outside of the above sample, including one with the manager for the Japanese branch of a major international logistics firm, who had only recently been transferred to Japan for this role. He explained how the company had switched over to a server-based fax system, which allowed faxes to be stored and retrieved at any time on any office computer without the need for printing so as to reduce paper waste. Despite this, the Japanese staff continued to print off every fax.

One common thread through the English-language articles about Japan's fax obsession was a link to Japanese culture. The question of whether fax usage was a part of Japanese culture divided opinion. Some acknowledged that it had become ingrained in the culture, while others said that it was unequivocally not. A couple of interviewees linked fax's success to the Japanese tradition of letter-writing and calligraphy, a connection made by several of the news articles (e.g. *BBC News* 2012). On the other hand, others saw it as simply a means of sending documents, not some cultural artefact.

Of the companies interviewed, only two considered faxing to be necessary (C4 & C6). C4 is a company that specialises in fax-based marketing, so it is understandable that it would consider fax necessary as it is at the core of the services it offers. The only other company to consider faxing necessary was C6, the lettings agent, and this was because of demand from their landlord clients, many of whom preferred to receive documents via fax, as they would only print them anyway (Company 6 Interview 2015). Aside from this communication with the landlords, the agent rarely uses fax for other purposes. Most of the companies did acknowledge, however, certain situations where faxing was still required of them, even if they were predominantly

email-based. For example, sending invoices to the bank is something that has to be done via fax for security reasons.

Most telling from the interviews was that most interviewees saw fax as a dying technology. Outside of when fax is necessary, such as when dealing with the bank, email is the standard and preferred communication method. Many interviewees saw its demise as only a matter of time, though the marketing company (C4) has hopes the technology will keep going a little longer (Company 4 Interview 2015). This company firmly believes that there is still value in faxing, particularly in marketing, since advertisements delivered via fax are more visible than those sent by email. However, as a company that is dependent on the continued use of fax, they have a vested interest in the technology and any view they have regarding the future of fax cannot be entirely objective. In the opinion of two of the interviewed companies, fax was already a legacy product; its death was not a question (Company 8 Interview 2015; Company 10 Interview 2015). This goes against news articles, particularly the *BBC News* article from 2015, which was published after this fieldwork took place, and suggested that faxing was still common (*BBC News* 2015). Meanwhile, even articles from 2012 (*BBC News* 2012) and 2013 (*The Independent* 2013) were shown to be outdated by the interviews, with one interviewee commenting that the depiction more accurately described Japan a decade previously (Company 7 Interview 2015), so the state of technology use in 2005.

Table 4.5 sought to group the answers given by the interviewees into broad categories of response. Indeed, many of the answers given during the interviews were similar, indicating a commonality among the interviewed companies' use of technology. Below in Table 4.6, this preliminary coding has been refined further, bringing the total number of categories down to three conceptual categories:

Coding	Response Type
<i>Purpose & Practicality</i> Necessity, Visibility, Ease of Use, Convenience, Paper	Fax is necessary to the company Fax is necessary in certain circumstances Fax is an emergency contact method Fax is for communicating with clients Faxes will be seen Fax is simple Fax is passive Fax can be quicker Faxes can be passed around
<i>Demand</i> Clients, Paper, Aged People	Fax is preferred by older people Fax is for communicating with clients As long as there is a demand, fax will be offered Fax is necessary in certain circumstances
<i>Culture</i> Paper, Letter Writing	There is a connection to the letter-writing tradition The Japanese read between the lines Paper is superior Fax suits Japanese mentality

Table 4.6 Final Coding of Companies' Responses

The previous section has already discussed and analysed the interviewees' answers, but this final coding provides a useful summary for the motivations and rationale behind the continued use of fax machines, beyond the stereotype-laden explanations given in the news articles.

Purpose & Practicality

Of the companies interviewed, all used email. Fax was retained because it still had a purpose and could not be replaced by email. With the exception of the marketing company, which offers fax services, fax is often only kept because it is needed, such as for sending bank invoices. The marketing company is successful because faxed advertisements have greater visibility than emails. While faxing may not be as prominent in Japanese companies as claimed, there is an idea that Japanese business is still very much reliant on paper. With the exception of relatively new companies that were mostly IT based (such as C7), most of the companies used a lot of paper. Several explanations were given for this:

- Printing documents out allows for them to be passed around the office
- Documents need to be stamped using a *hanko*, the traditional personal stamp which is used as an equivalent to a signature
- The Japanese simply prefer paper—it is the tactile experience they prefer over working off a screen

Fax is also very simple to use, as one simply inserts the document, dials the number for the desired recipient and hits send. In some cases, fax is thus quicker than email, such as at the newspaper (C9), which needs to send copies of the proofs around the company (Company 9 Interview 2015).

Demand

While email is preferred by most companies, many seem willing to keep the option of fax open if there is a demand for it (even if this is small). For example, the food and catering website, despite only receiving a negligible number of orders via fax, will continue to have fax as an ordering method (Company 5 Interview 2015). According to many interviewees, this demand tends to come from the elderly. Often the elderly do not have the Internet, and so faxing will be a primary method of communication. Unsurprisingly then, fax is seen as a technology that will eventually die out. For now, there are occasions where it will still be used, but most companies are using email for the vast majority of their communications, retaining fax so long as there is demand from clients (mostly elderly) who prefer to use fax.

Culture

According to one interviewee, a possible explanation for Japan's higher usage of fax machines (according to news articles) is that faxing is highly passive, and this fits well with Japanese culture (Company 6 Interview 2015). You do not need to do anything to receive a fax: it will print itself out. Moreover, that faxes are printed onto paper is considered an appealing factor, interviewees acknowledging a preference in Japan for tactility and tangibility of a physical document. Some interviewees linked this to a letter-writing tradition in Japan, which continues to this day as a handwritten letter (and to a lesser extent, a printed typed letter) is considered much politer and more formal than an email.

Evaluation

This chapter began by analysing a sample of articles containing the keywords 'Japan' and 'fax'. These articles depicted Japan as a country stubbornly resisting the transition from communicating via fax machine to other methods. CDA showed that underlying these texts were assumptions based on stereotypical knowledge about Japan, and depictions of the country were often characterised by the *us versus them* dichotomy described in van Dijk's ideological square. Having established that these articles contained evidence of Orientalism and stereotyping, this case addressed

whether the depictions of Japan corresponded to reality and could be observed through empirical investigation. Consequently, interviews with fax machine manufacturers and ten companies from different industries were carried out in order to ascertain the extent to which faxing remains important in Japan. While every company interviewed had faxing capability, the situation was quite different from the one news articles were making out. Companies had faxing, but only because it was built into their printers. Fax machines *were* occasionally used, but as highlighted above, there was good reason for it. As the interviews show, the Japanese do not retain fax machines in place of email. Email is by and large the standard, and faxing is kept for specific uses where an email would be inappropriate.

Traditionally, the Japanese did not use signatures, but rather *hanko*, personal seals (Takada & Lampkin 1996, 73). These seals are still used in many situations, making the transition to digital signatures more difficult than other countries. While emailed documents have gradually gained acceptance, a faxed version of a stamped document is the standard because it is seen as analogous to the original. Multiple interviewees also pointed out the superiority of paper—the Japanese are not ready to go paperless. This ties back to the use of *hanko*, as a printed document can be passed around from person to person and their individual seals stamped, which cannot be done so easily by email. Another reason for faxing is that it still has a place in certain situations. For example, in the case of funeral invitations, an email would not be considered suitable due to its associations with lack of formality and lack of a personal quality. Meanwhile, fax, which is considered as more or less a letter, is considered an appropriate means of communication for such a formal and personal occasion.

The news articles were not completely inaccurate about faxing in Japan. There are still many fax machines in Japanese offices, but they are not necessarily being used. During the interviews, on several occasions the idea of faxing being something done by the clients came up. This is something news articles did not go into much depth about, if at all. C3, C5, and C6 all receive faxes from their clients, but these clients are not other businesses, rather they are individuals. While articles hinted at the high ownership of fax machines in Japanese households, their potential significance was not addressed. Unlike in many countries, fax machines were not an exclusively business device in Japan—they were used in the home too. While business fax machines are being rolled into multifunction units, fax machines for the home are still being sold as dedicated units. Thus, a complete focus on the use of fax machines in Japanese businesses cannot adequately describe the state of fax usage in Japanese

today, hence why this study also approached the manufacturers themselves in order to investigate the home market. Unfortunately, due to the scope of the study, there was not enough time to carry out an adequate survey of the Japanese public and so the focus was on manufacturers and businesses. Observations at a popular electronics store, however, gave a valuable insight into the state of the homefax (a fax machine for domestic use) market in Japan today, showing a particular emphasis on the elderly as a target demographic. Articles did acknowledge the effect of the elderly on the retention of the fax but framed the ageing population as a uniquely Japanese problem. However, according to the OECD, the elderly (those beyond the working age, aged 65 and above) population across the world is increasing, and while Japan currently has the highest elderly population in the world at 34 million people (Statistics Japan 2018), it is not a uniquely Japanese problem. Indeed, 17.26% of the British population is aged 65 and above and is increasing (OECD 2018).

The CDA of news articles found that articles focussed on an emotional bond between the Japanese and fax-machines. That is, the Japanese are engaged in a love affair with the devices. In describing this unique relationship between Japan and the fax machine, the articles implied or even explicitly stated that this was not the norm, explaining that the fax machine was an antiquated piece of technology. Analysis found that Japan was often considered in terms of its 'traditional' attitudes, which would explain why old technologies, such as the fax machine, remain in use.

The empirical research carried out in Japan as part of this case found that, while almost all companies had fax machines, they were only used for specific purposes, if at all. One's exposure to fax in Japan is thus dependent on the particular industry in which one works, as well as the job and rank which one has in that industry. Interviews also revealed a link between the age of the interviewee, the industry, and the age of the company. As such, it is possible that the view that Japan is still reliant upon the fax is a matter of individual perception, depending on the company one works for and one's role within that company. Such factors are not Japan-specific, which raises the question: is the depiction of the West being fax-free a matter of perception, too? As the preliminary data gathering in advance of the October 2015 fieldwork found, faxing continues across the world, and usage is expected by businesses to increase (IDC 2017). According to a 2017 survey of companies in Germany, faxing continues to be a common form of business communication, used more frequently than video conferencing, communicating by mobile phone, using web portals/customer interfaces, and using social media (Bitkom 2017). Usage is not

so frequent in the UK, but according to a survey by business communications provider Fuze, 30 per cent of UK workers see fax machines as 'essential' (Highfield 2016).

The claim that fax machines are used heavily in Japan appealed to a complementary depiction that Japan is decidedly low-tech, where email is rarely used in offices and that a significant number of Japanese were not on the Internet. According to US cloud-technology company Akamai's global Internet report, Japan is one of the top-ranking countries for high-speed broadband, just behind Switzerland and, at number one, South Korea (Akamai 2017). Indeed, according to a survey by eMarketer for Japan's Ministry of Internal Affairs and Communications, 75.8% of respondents across all age groups use the Internet daily, using not only desktops but smartphones, too (eMarketer 2016). This high usage of the Internet in Japan is not a recent development, something which can be seen in statistics from the International Telecommunications Union's (ITU) report on percentages of populations using the Internet between 2000 and 2016 (International Telecommunications Union 2016). According to the report, in 2012, when the first faxing-Japan article in the first case sample was published, 79.5% of the population were using the Internet. This is lower than the United Kingdom at this time, which had a diffusion rate of 87.48%, but is within five percent of other highly developed countries, such as France which was at 81.44%, Germany at 82.35%, and the United States at 74.70%. As of 2016, however, the percentages are very similar, with 92% of the Japanese population online, compared with 94.78% in the United Kingdom. Moreover, there has been comparatively little change in the United States, where the percentage for 2016 was 76.18%, an increase of only 1.48% over four years (International Telecommunications Union 2016). Given these statistics, Japan's use of communications technology, including fax machines, is not incomparable to that of many other countries, but is exaggerated through stereotyping, resulting in depictions that present Japan as the Other.

In the methodology chapter, a visual scale of perceived level of technology and the degree of Orientalising by the media was proposed (Figure 3.1) in order to illustrate the puzzle of this research. In this original diagram, Japan was placed on the low end of perceived level of technology for its fax use, but also at the high end of perceived level of technology for its use of robots. Having carried out observations and interviews in Japan, and set these findings against the claims about Japan's fax use in articles, it has been shown that these depictions are rooted in stereotyping and

Orientalism. Indeed, fax machines are only used for specific reasons in Japan, and as the studies above demonstrate, faxing is carried out across the world, including in the United Kingdom (Highfield 2016). Figure 4.8 adjusts Japan's positioning on this scale in relation to faxing, taking into account the findings of this chapter:

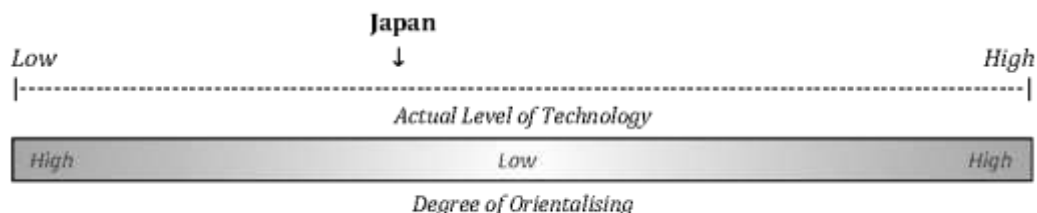


Figure 4.8 Adjusted Scale of Actual Fax Use

Japan has been relocated closer to the centre, reflecting not only the lower usage of fax machines found in Japan compared to the claims in news articles, but also the findings that faxing occurs in many countries. Japan has not been situated in the middle, however, because fax machines as specific devices (which can still be found on sale in Japan) have become less common in many countries (Coopersmith 2015) and are being replaced with multifunction printers with faxing capability, or Internet faxing, through computers (Davidson Consulting 2013).

Conclusion

This chapter sought to address two of this thesis' subsidiary questions in relation to the example technology of fax, which represents the depiction of low-tech Japan. The CDA carried out in the first section of the chapter analysed articles about faxing in Japan in order to address the first subsidiary question, which asked whether articles appealed to stereotypical depictions, and by extension, Orientalism. It was shown that Japan is considered to be obsessive about faxing, and is described as infantile in its stubbornness to abandon the device. The language used in articles often played upon a presumed existing association between Japan and technology, subverting expectation in order to demonstrate how Japan is really low-tech.

The low-tech depiction of Japan, in which Japan has not entered the 21st century is indicative of Saidian Orientalism, more than Techno-Orientalism, because although the depictions relate to technology, Japan is shown to be stuck in the past, juxtaposed against modern, technologically-advanced Britain. As such it adheres to Said's 'dogmas' of Orientalism: that the Orient (here Japan) is underdeveloped and inferior to the West, that abstractions will always be drawn from a 'classical' representation

of the country rather than the present, and that 'the Orient is eternal' (Said 2000a, 104).

So far, this thesis has addressed only one depiction of Japan, that of low-tech Japan. Japan is also often portrayed as a high-tech country, however, home to some of the world's most advanced robotics, which has led to this puzzle of contradictory depictions. This chapter has shown that the low-tech depiction of Japan is based on exaggerations, relying heavily on Orientalist assumptions and stereotypical depictions of Japan. Does that then mean that the opposing depiction, that Japan is high-tech, is the correct depiction? Or is this another stereotypical depiction? Thus, the next chapter addresses this by introducing a second technology, involving articles depicting the high-tech, robot-filled Japan. Following the same methodological structure established in this chapter, the next chapter will analyse articles about robots in Japan, before setting these up against the author's own observations and interviews.

Chapter 5: High-Tech Japan

The previous chapter examined news articles portraying Japan at one extreme: as a technologically-backwards country. Fax machines were taken as an example of such a technology, and the sampled articles attributed the use of this technology to Japanese culture and an ageing society, which is holding the country back from moving past the device. The CDA of these news articles found that these portrayals contained Orientalist discourse, as defined by Said (1978), appealing to notions of Japan as traditional, collectivistic and depictions of Japanese corporate culture. These depictions of Japan and the claims of widespread fax use were set up against data obtained during a period of fieldwork in Japan, in which observations and interviews were carried out. It was found that while fax machines can still be found in Japanese offices, their use is restricted to specific occasions, often for pragmatic and rational reasons. Observations suggested that the market for personal fax machines is stronger, with electronics stores stocking a wide range of 'homefax' units, the in-store advertising which targets the elderly and housewives. Although the elderly are mentioned in some news articles, their significance to the homefax market is underplayed, nor do articles mention that homefax units cost only slightly more than a landline telephone unit, and so many people may buy homefaxes primarily as telephones, with fax functionality just in case they should ever need it. By and large, articles' inaccuracy could be attributed to a lack of context, with a greater focus on cultural explanations, rather than pragmatics.

The puzzle at the centre of this study is that of contradictory depictions of technology and Japan, and their apparent coexistence. Japan is sometimes depicted as being low-tech, reliant on fax machines, as seen in the previous chapter, while at others it is high-tech. This chapter addresses this opposite extreme: of Japan as a country at the pinnacle of technological development, taking robots as an example of such a technology.

As the introductory chapter (Chapter 1) noted, 'robot' is a term that can be defined in a number of ways, but this study looks at only those robots that are being used in a customer-facing role, that is they are involved in direct interaction with human beings. Unlike industrial robots, this sort of robot is often humanoid, designed to have a 'personality', and it is this kind that this thesis considers. Humanoid robots are particularly salient as an example of high-tech, almost futuristic technology, as they

have been present in speculative fiction and science fiction since the emergence of their genres, from Karel Čapek's *Rossum's Universal Robots* (R.U.R) in 1920 (Logsdon 2000, 18). Robots from popular fiction, such as Robby the Robot from the 1956 film *Forbidden Planet* and C-3PO from the *Star Wars* film franchise, have often been anthropomorphised, and this tendency towards 'metallic humans' has influenced real-world robot design, too (Schaefer et al. 2015, 14).¹² While these examples of robots are Czech (in the case of R.U.R) and American (Robby the Robot and C-3PO), the popular image of robots in Japan is largely similar, where the two most enduring fictional robots are both anthropomorphic: Astro Boy and Doraemon (Pellitteri 2011, pp. 152-190). The shared tendency to anthropomorphise robots, as well as similarities in robot design, is no coincidence, as Pellitteri argues that American and Japanese media industries have been influencing each other's conceptions of robots for decades, and before this through consumer culture, which Japan producing tin toy robots for the American market (Pellitteri 2011, pp. 123-140).

In addition to humanoid robots, robots have been anthropomorphised in other ways too, such as animoid robots. While such robots have often been developed as robot pets (which are not being considered in this study), others have been created to assist with the delivery of services, particularly elderly care, such as Paro, a robot seal (Griffiths 2014), and ROBEAR, a robotic bear designed to aid in elderly care (RIKEN 2015). Such robots have been included in the definition of robot used by this study because they fulfil the same function as fully humanoid robots.

As the literature review (Chapter 2) showed, Japan has been characterised as obsessive in its relationship with technology, and a specific variant of Orientalism has emerged, Techno-Orientalism, which depicts Japan as overly high-tech compared to the West (Morley & Robins 1995). This is reflected in the scale of depicted level of technology in the press (Chapter 3, Figure 3.1), where Japan is situated at the far right of this scale. This chapter, like the first example technology chapter, addresses the first and third subsidiary questions of the thesis:

- 1) To what extent are stereotypical depictions present in news articles about technology in Japan?
- 3) Are contradictory stereotypical depictions supported by evidence?

¹² Robby the Robot is a good illustration of the consistency of the image of 'robot' in the popular imaginary, as the same costume was used in 27 different film and tv programmes, between 1956 and 2005, according to the Internet Movie Database (IMDB 2018).

The chapter has thus been split into two sections in order to address these two questions: (i) first describing how high-tech Japan is depicted in British news media, using the example technology of robots, and the extent to which these depictions rely on stereotyping and Orientalising; and (ii) investigating the extent to which these depictions are borne out in reality or are exaggerations by analysing data and interviews from robot manufacturers and Japanese companies.

Section one contains a critical discourse analysis (CDA) of news articles featuring references to Japan and robots in the British press. The articles are analysed for their use of language, their structures, and the assumptions that they make in their claims about robots in Japan. Following this, section two describes the empirical fieldwork carried out in Japan, incorporating interviews with robot manufacturers, robot users, and observations of robots, in order to compare the claims made in news sources with the author's own findings. By the end of this chapter, the reader will have a clear understanding of the depictions of high-tech Japan in the British news media, and it will be shown that these are stereotypical depictions, which rely on assumptions about Japan and its relationship with robots.

Section One: Critical Discourse Analysis of News Articles

The sampling procedure for this second example technology was identical to that employed in the first example technology. Articles were drawn from the nine publications established in the methodology chapter (Chapter 3), representing some of the most read British news publications, both in print and online. Database searches on LexisNexis and publication websites were carried out for the keywords 'Japan' and 'robot' in headlines and lead paragraphs within the date range 2000 to 2015. The keyword search also accounted for variations of these words, such as pluralisation, and derivative words like robotics, Japanese, etc. For the purposes of CDA, articles with fewer than 50 words were omitted, and the sample was manually checked in order to remove any articles that had mistakenly ended up in the sample, for example in cases where the keyword may have appeared in an advertisement or a web-link, and not the article itself.

As this example technology is only concerned with anthropomorphic, customer-facing robots, articles referring solely to industrial robots or using 'robot' in other senses (such as one article about a sports team called the Robots, and another about driverless taxis) were also removed. Moreover, in the case of some web publications,

there were instances of edited versions of the same article appearing multiple times and such articles have been treated as a single text. In total, 153 articles were obtained for the sample. A breakdown of this sample can be found in Appendix 2, indicating the number of articles per publication, the year of publication, and the frequency of keywords. In addition, Appendix 2 provides a guide to the shorthand used to reference the sample articles in this chapter, which have not been cited using standard Harvard citation, in order to distinguish them from the sample of articles for the first example technology as well as from the main works referenced for this research.

The breakdown in Appendix 2 shows the number of times that the keywords appear in any given article, and while the longer the article is, the more instances there is of either keyword, there is no fixed pattern as to which term is more prevalent. In some articles, the word 'robot' or variations thereupon (such as 'robotics') appear far more than the word 'Japan', though this can be explained by the fact that references to Japan are only necessary to establish the location of what is being described, whilst if the article is about robots, that word is likely to be repeated multiple times throughout the article. As such, the keyword search cannot tell us much about the reporting of Japan and robots in the British press, and so a more comprehensive analysis was needed.

As the methodology chapter (Chapter 3) established, CDA is well-suited to in-depth, close analysis of texts; looking at not only the specific words used, but also the contexts in which they are used, and the unwritten assumptions upon which they are based. CDA is being used here specifically to test the extent to which these articles contain stereotypical depictions, relying on stereotyping and Orientalising. Stereotyping and Orientalist thought can be manifest in several ways, including in the specific use of language, the claims made about a country, and the attitudes towards that country. CDA's attention to both verbal and non-verbal elements of texts thus make it the most appropriate method of analysis, particularly when coupled with van Dijk's assertion that discourse itself is a manifestation of the dichotomy of us versus them (van Dijk 1998, 267).

Analysis

As with the first example technology, the newspaper articles have been analysed using CDA according to the thesis' analytical framework, which follows three

analytical categories and is based on van Dijk's analytical structure: context, structures, and rhetoric and meaning (van Dijk 1993a).

Considering the assembled sample as a whole, these three categories will be considered in turn, before these analyses are drawn together for evaluation. The aim of this CDA is to expose any underlying stereotyping and assumptions within these news articles. While the identification of stereotypical thought does not automatically negate the truthfulness of an article, claims made by newspaper articles will be tested in the second half of this chapter. Before carrying out the analysis, however, it is useful to have a reminder of the three categories of analysis: context (the contexts in which the text was produced and consumed), structures (the ways in which the text is put together, such as the structure of the narrative, the use of grammar, and the use of deictics) and rhetoric & meaning (the language itself, the use of rhetorical devices, loaded language, as well as the appeal to assumptions embedded within the text). Due to the size of the sample, it is infeasible to reproduce articles in full or even quotations from every article. Instead, representative examples have been chosen from the sample to illustrate the arguments made.

Context

The keyword search used to obtain the sample for this example technology yielded 153 articles, considerably more than the first example technology (18 articles). This would indicate a stronger or more common association between robots and Japan than fax machines and Japan. These articles are not considered individually here, as there are too many, but by bringing them together and treating them as a single sample, it is possible to examine the wider, shared contexts in which these articles were produced and consumed. First, let us consider the production of these texts: these sources are all British publications, with journalists based primarily in the UK. In the few articles where the journalist is writing from Japan, however, this is often signposted after their name, which can be seen in examples for interactional control below, but in many cases this is not given or no authorship information is given at all.

Access is the next consideration within the context category in CDA, referring to who holds discursive power in the discourse. As with the first example technology, since these are news articles, it is the journalist's voice that is carried through the article, and the inclusion of other voices is dependent on the journalist. In the majority of articles about robots, the Japanese robot manufacturers or the Japanese companies

using robots are quoted directly, thus giving the Japanese voice a degree of power that allows for greater accuracy of reporting. This is not always the case, however, and some articles refer to British robotics experts, or they fail to name the expert to whom they are referring and it is unclear whether they are Japanese or not, such as in the examples below:

The project chief said: “Looking at the ageing of society and the falling birth rate we decided that this could work as a business. We want to offer Wakamaru as a product that helps society.” (DT2003)

Claims made by an expert in artificial intelligence predict that in less than five years, office jobs will disappear completely to the point where machines will replace humans (MailOnline2015d)

Interactional control, the amount of discursive power given to voices other than the journalist (Fairclough 1992, pp. 152ff), can thus be seen to differ to that in the low-tech Japan sample of news articles. However, even if the journalist gives over a degree of control to other voices in the article, the journalist is still nevertheless the primary authority in the article, as it is they who are informing the reader of developments, and other voices are merely in quotation. For most articles, it is unclear what relationship the journalist has with Japan, whether they are a Japan specialist or have lived in Japan, or what other expertise they have on the subject. In some articles, as has already been seen in the first example technology, sometimes an article is printed without a journalist being credited, or the news article is a reprint of a newswire from a source such as the *Associated Press* (AP). There are exceptions to this, and in some instances articles choose to explicitly state the journalist’s relationship to Japan:

Jonathan Watts in Tokyo (G2000)

Colin Joyce in Tokyo (DT2003)

Justin McCurry in Tokyo (G02015a)

In these cases, these articles are demonstrably written in Japan, meaning that the journalist is potentially writing the article with first-hand experience of the subject matter. In articles where such information is not given, the location of production is uncertain, and this raises issues of access to material and the degree to which journalists are relying on second-hand information.

Beyond authorship, context can also refer to the situation of a text within a wider context. Often, articles begin by providing the audience with a frame of reference, from which they can better understand the story they are about to read. In articles

about robots, the CDA found several ways in which Japan was framed. First, one way in which articles began was by establishing an existing relationship between Japan and robots, as demonstrated by the example quotations below:

At the forefront of robot technology since the 1970s, when manufacturers rushed to automate factory floors, Japan has no problems with machines taking over the living rooms (G2001a)
 Japan is the spiritual home of the strange, and often pointless, gadget (Mail2004)
 Japan's rise of the robots (BBC2005b)
 Scientists at Japan's (where else?) institute of advanced technology (TM2010a)
 In Japan robots are friendly helpers, not Terminators (BBC2011a)

Each of these examples is different, but achieves the same effect: they explain to the reader that Japan is the home of robots. BBC2005b suggests a gradual increase in robots, but also has potential negative connotations as 'rise' often collocates with 'up', and a robot uprising is a reoccurring theme in articles about robots, as will be seen later in the chapter. The fifth quotation, while mentioning 'friendly helpers', is not entirely free of negative connotations, as its reference to 'Terminators' again invokes this sense of robot uprising and a fear of robots, which will be explored in more detail below. Many other articles begin by explaining that Japan is a leader in robotics, and phrases such as 'spiritual home' (Mail2004) demonstrate that it is assumed that the audience should be familiar with Japan's reputation.

Many articles linked the development of robots with the possibility that they could replace humans in certain professions. The below examples are some of the quotations which explicitly refer to this automation. These sentiments typically featured either in the lead paragraphs, or in the headlines themselves, and there was often a reiteration of the point at the end of the article. Thus, many articles were set up with a negative outlook towards robots, referring to possible 'dystopias' (MailOnline2015c) and the possibility of 'evil robots taking over the world' (BBC2005b):

I have seen the future: Domestic robots will be another example of useless technology, argues Brian Aldiss (DT2002)

In Japan, they work as carers and look eerily lifelike...but what would happen if the robots turned against us? (Mail2007)

Unnervingly human androids coming to a future very near you (MailOnline2014j)

The hyper-real robots that will replace receptionists, pop stars... and even sex dolls:

But maybe that is just stage one in their plot to take over the world (BBC2015d)

In the long term, it could have the potential to play out like a fictional dystopias [sic] in which intelligence greater than humans could begin acting against their programming (MailOnline2015c)

These quotations come from the beginnings of articles, from the headlines or lead paragraphs, and propagate a discourse that Japan is technologically ahead of other countries, in this case ahead of Britain. Japan is also used to offer a vision of a possible 'future very near you' (MailOnline2014j), but not all of these depictions are positive, such as descriptions of the technology as 'useless' (DT2002) or even a threat (MailOnline2015c).

Beyond Japan's relationship with technology, another common way in which the articles were situated within an existing context or discourse, is by situating the discussion about robots within the subject of Japan's ageing society. Even if the robots had not been specifically developed for care of the elderly or the decreasing workforce, references were often made to the ageing population of Japan. Moreover, this is not a recent attribution, and is used to provide context to articles about robots from 2000 to the end of the timeframe.

Ageing planet: Old in Japan? Retire later, then buy a robot (G2001b)

A CHILD-LIKE robot that combines the roles of nurse, companion and security guard is to go on the market to help the growing ranks of elderly Japanese with no one to look after them (DT2003)

In Japan, which is facing a demographic time-bomb as fewer babies are being born and more people are living into their dotage, the authorities are looking to use robots to look after old people (Mail2007)

And with a rapidly ageing population, coupled with a falling birth rate, the demand for robots is expected to increase further (BBC2014d)

Japan is in desperate need of carer robots as it has a huge elderly population and not enough young people to look after them (MO2015b)

Japan's ageing society is characterised as a 'demographic time-bomb' (Mail2007) and this sense of urgency is common in articles contextualising the use of robots within ageing Japan, through descriptions of its 'rapidly' ageing population (BBC2014d), and the 'desperate' situation the Japanese are in (MO2015b). However, it is not only Japan that produces robots, and many news articles will situate the developments in Japan within a broader context:

The idea of using robotics to care for the elderly is being trialled everywhere from Singapore to Salford (BBC2013c)

The robots were developed by French robotics company Aldebaran, in which SoftBank [sic] took a stake in 2012 (Sky2014b)

China still lags far behind Asian robot giants Korea and Japan (BBC2015g)

Nao is designed by French firm Aldebaran Robotics (MailOnline2015b)

Although built by a French company in 2006, it's Japan that pushing for a robotic future to help deal with the country's shrinking workforce (MO2015a)

Articles on the robots Nao and Pepper (Sky2014b, MailOnline2015b, MO2015a) provide the additional context that, although these robots are used in Japan, they were actually developed in France, by a French company.¹³ In spite of this, Japan is still presented as the country 'pushing for a robotic future' (MO2015a). This depiction of Japan working towards a future where robots feature more in everyday life is common across the sample, and not just limited to more recent articles.

As noted in Chapter 1, another specific instance of when Japan has been clearly linked with robots is in the aftermath of the 2011 earthquake and tsunami, which resulted in the meltdown of the Fukushima Daiichi nuclear plant. Articles from the *BBC* (BBC2013d) and *The Daily Telegraph* (DT2011) suggest that there was an expectation that Japan would have a robot capable of dealing with the disaster immediately, which feeds into the idea of Japan being technologically ahead. This reinforces the discourse that Japan is technologically advanced, but also introduces the idea that Japan may need help from other countries, as it is incapable of solving the problem itself:

¹³ Although sold by SoftBank, the robots Nao and Pepper were developed by the French company Aldebaran, which was later bought by SoftBank (Guizzo 2012) and renamed SoftBank Robotics.

IT HAS built robots to take the place of chefs, concert pianists and even sumo wrestlers, but when it comes to staving off nuclear disaster Japan has been left relying on human efforts (DT2011)

Darpa said it had been inspired to organise the challenge after it became clear robots were only capable of playing a very limited role in efforts to contain 2011's Fukushima nuclear meltdown in Japan (BBC2013d)

The eight-part 'rescue challenge' was inspired by the nuclear meltdown at Fukushima during the 2011 Japanese tsunami, where it was realized robots could do very little to help (MailOnline2013c)

In 2013, another widely reported instance of the use of robots was the sending of the robot Kirobo to the International Space Station. The significance of this robot is shown by how news sources refer to it as the first robot to speak in space (DT2013a, Mail2013), while others consider its potential importance for the mental wellbeing of astronauts (IO2013d). As can be seen in these examples, the serious context of sending a conversation partner for the one Japanese astronaut is lightened by the reference to the robot as a 'robonaut' (DT2013a) and the reference to 'The Lonely Frontier' (IO2013d):

Japan sends talking robonaut into space (DT2013a)

Space: The Lonely Frontier; Of all the hardships astronauts face, lack of company can be the most daunting. Could a talking robot alleviate the problem? (IO2013d)

Kirobo, meaning hope, is the first talking robot in space (Mail2013)

It is worth noting that the 'meaning' provided in the third quotation (Mail2013), is not entirely accurate. The Japanese word for hope is actually *kibō* (希望). Rather, Kirobo is a portmanteau of *kibō* and the word for robot, *robotto* (ロボット). This sample, when considered as a whole, demonstrates a shared context in which robots in Japan are discussed. As has been seen in this analysis, despite different publications' audiences or the sizes of their readerships, there are commonalities across all the publications in the reporting of robots in Japan, indicating a common discourse and shared understandings of the present situation. Japan is assumed to be the world leader in robotics, and since this claim is never backed up with evidence or justification, it is reasonable to assume that the audience is expected to share this impression of Japan. Common amongst these articles is a sense of fear and apprehension, as robots are contextualised within references to popular science fiction movies and dystopian tropes about future robot uprisings. Articles are often considered in the context of the future, whether dystopian or not, and there is a focus

across all articles on the ageing population and consequent shrinking workforce of Japan, and the future reliance on robots. In some articles, Japan is shown to be already in this robotic future.

Having established the contexts for these articles, the analysis now moves on to the way these articles are structured: the way sentences are organised, the way grammar is used, and the way Japan is set up as an antithesis to the West, as per van Dijk's ideological square.

Structures

The first example technology chapter established a narrative structure to which newspaper articles often conform, following Labov and Waletzky's categories for personal narrative (Labov & Waletzky 1967). These categories are as follows: the abstract, the orientation, the complicating action, the evaluation, the resolution and the coda (Labov & Waletzky 1967). To illustrate this structure with reference to robots, a web article from *The Independent* has been selected, in which the sending of the robot Kirobo to the ISS is discussed. The article begins with the abstract, which is a summary of what the article is about:

'The first talking humanoid robot "astronaut" has taken off in a rocket' (IO2013c)

This is followed by the orientation, which provides context by setting the scene of the event being communicated:

'Kirobo, as it has been named by its Japanese creators, was among five tons of supplies on a rocket taking off from Tanegashima, in south-western Japan, bound for the International Space Station, the country's space agency said today' (IO2013c)

Once this has been established, a complicating action is introduced, which is not necessarily a problem, as the name would suggest, but rather is better described as 'what happened next?', illustrated by the perceived problem of cute robots:

'Japan boasts the most sophisticated robotics in the world, but because of its "manga" culture, it tends to favor cute robots with human-like characteristics with emotional appeal, a use of technology that has at times drawn criticism for being not productive' (IO2013c)

An evaluation is then offered:

But designer Takahashi said sending a robot into space could help write a new chapter in the history of communication' (IO2013c)

The problem or matter described in the complicating action stage is then given a resolution:

“I wish for this robot to function as a mediator between person and machine, or person and internet and sometimes even between people,” he said’ (IO2013c)

The article is then brought to an end by the coda, which brings the audience back to the present:

‘JAXA, Japan’s equivalent of NASA, said the rocket launch was successful, and the separation of a cargo vehicle, carrying the robot to the space station, was confirmed about 15 minutes after liftoff’ (IO2013c)¹⁴

Beyond the overall structure of an article, other structures within the articles should also be addressed, these being the surface structures, which include the syntax and grammar of the texts, as well as deictics and pronouns. Often the robots are gendered by the journalist, and the description of ‘his’ or ‘her’ actions bestow a sense of autonomy and agency upon the robot, even if it is lacking AI.

It will be some years before she is a challenger on Strictly Come Dancing (DT2005a)
 SHE speaks four languages, works 24 hours, never wastes time chatting on the phone – and always looks her best (M2005a)
 A robot actress made her stage debut in Japan in a tear-jerker about a girl suffering a fatal illness (TM2010c)
 I spent a day this week showing my new friend Harry Nao around my office (BBC2015d)
 Depending on his performance, more robots could appear at other branches in the coming months (GO2015a)

The gendering is carried out regardless of whether the robot is intended to look like a male or female, or has only a general humanoid appearance, such as Nao or Pepper. In the case of one *BBC* article, this anthropomorphism is taken further by the robot being assigned a name, Harry (BBC2015d). As well as the gendering of the robots giving a sense of agency to the robot, the actions of the robots themselves are described as if they are the robots’ own, rather than being programmed.

¹⁴ It is worth noting here that JAXA is not explained by giving its full name, Japan Aerospace Exploration Agency, but is instead called ‘Japan’s equivalent of NASA’, thus reaffirming the anglo-centricity of these articles.

A robot named Asimo walked into the dining room at the city's Hrzansky Palace and shook hands with the two leaders (BBC2003)

THE machine whirrs into the room and offers me its hand to shake (M2004)

Fulfilling the dreams of bosses everywhere, Wakamaru San is never late, doesn't gossip or throw sickies, and somewhat unnervingly never stops smirking (G2007)

The robot actress had no problem processing her lines (TM2010c)

As Harry took my hand and walked, very slowly into Broadcasting House a crowd gathered (BBC2015d)

The language used to describe the activity of the robots is almost always active, rather than passive, suggesting that these robots have a life of their own, which reinforces the idea that robotics is in such a state of development that there is advanced AI in use. Indeed, the robot Pepper, is described as an 'emotional' robot, such as in the quotations below.

Meet Pepper, the world's first robot that reads emotions: Cute droid knows if you're upset, cracks jokes and offers support (MailOnline2014e)

Pepper the Robot Knows if You're Happy or Sad (Sky2014b)

He analyses customers' emotions from their facial expressions and tone of voice, enabling him to greet customers and ask which services they need (GO2015a)

The tendency to ascribe gender and agency to robots is part of a common feature in articles of personifying robots. The first headline above asks the audience to 'meet' Pepper, even though Pepper is nothing more than a piece of technology or a product. Moving on from the way in which the robots are described, we now consider how Japan is presented through linguistic choices in the articles. Frequently Japan is characterised as a single unit, as if it has a collective consciousness.

But in Japan they take things much more seriously (M2002)

Japan has been obsessed with the idea of giant robots (BBC2009a)

Japan Wants Robot Olympics at 2020 Games (Sky2014c)

Japan is shown here to be 'obsessed' (BBC2009a) and it 'wants' a robot Olympics (Sky2014c). The language used does not refer to the Japanese people or individual desires, rather Japan is presented as having one voice and one desire. As Hood (2015) notes, 'within Japan there are many other cultures depending on the context [...] in general people in Tōkyō may do some things in a way that are different to people in Ōsaka' (Hood 2015, 15). Japan is clearly set apart from other countries, and the us vs theme dichotomy is seen in the above examples in the use of 'they' and 'their' to

highlight the ways in which Japan is different. Such language emphasises the differences between Japan and the UK, but in other articles, such differences are made much more explicitly.

We may both be tea-sipping, island-dwelling monarchies, but there are one or two differences between Britain and Japan. Fish, for example. They're potty about seafood, while we are bizarrely indifferent to the riches that swim around us (I2001)

Will machines for the aged herald the age of machines?: The Japanese vision of robots working alongside humans may be a cultural step too far for westerners (G2006a)

THEY can clean our cars, mow our lawns and even vacuum the living room. But in Japan they've gone one stage further - now there's a robot that will marry you (Mail2010)

In these above examples, the East vs West dichotomy is further reinforced, a clear indicator of Orientalism: Britain is one way, but Japan is completely different. Moreover, there is Techno-orientalism present in these quotations: the 'Japanese vision of robots' (G2006a), which is unique to Japan and is a 'step too far for westerners' (G2006a) for cultural reasons.

Beyond the structures, grammar and dichotomies found within the articles, there is also the language itself. The following subsection considers what is said about robots in these articles, the kind of language used, as well as the things that go unsaid.

Rhetoric & Meaning

Rhetoric and meaning refer to the actual language employed in the articles: the use of rhetorical devices such as alliteration or rhetorical questions, and the meaning of these, focussing particularly on the assumptions upon which they rely. The language used is of utmost importance because every word is a decision, conscious or otherwise, and the use of language is not neutral: it is informed by social and cultural norms, by assumptions, and by stereotypes (Fairclough & Wodak 2009, 275; Richardson 2007, 14). The language of news articles provides much insight into how they are meant to be consumed, and how seriously the subject matter is perceived (Monsefi & Mahadi 2016, 68). For example, many articles about robots in Japan chose to use humour in the language of their reporting.

bringing a whole new meaning to the expression “robotic acting” (BBC2004a)
 Robot trumpets Toyota’s know-how (BBC2004b)
 The unstoppable onslaught of the robots is continuing in Japan, where they will soon be used to... sell coffee machines! (MO2014b)
 Her voice was calm, but her performance a bit, erm, mechanical (TM2010c)

Plays on words and puns are common throughout the sample of articles, though found predominantly in tabloids. The use of humour could indicate that robots are not taken seriously. Indeed, robots are considered as much ‘Other’ as Japan. This can be seen in the close association between Japan and robots, through discussion of the country’s obsession with robots (BBC2009a) and ‘quirky technological fads’ (BBC2015c). Robots are considered ‘unusual’ from the perspective of the Western journalist, but make sense within the context of Japan (MailOnline2013a). Humour is typically found in the headlines of articles, although chiefly in the *Daily Mail* and the *Mail Online*. On the other hand, while humour could indicate that robots are not taken seriously, but it is worth noting that humour is a common feature in English-language news. An analysis of news headlines by Monsefi and Mahadi (2016) found that wordplay is highly common, including puns, rhyme, alliteration, euphemism, irony and metaphor (Monsefi & Mahadi 2016, pp. 73f).

In addition to humour, one common use of language is surprise, or lack thereof. In the examples below, it is expected of the audience to have a particular image of Japan and thus to take the information presented for granted. Phrases such as ‘where else’ (TM2010a) or ‘should come as no surprise’ (MailOnline2013a) reaffirm the depiction of Japan as technologically advanced; and, since the statements rely on the audience’s assumptions, no evidence is required.

Scientist at Japan’s (where else?) institute of advanced technology (TM2010a)
 The unusual sight should come as no surprise however, with Japan responsible for more than 50 per cent of the world’s robot population (MailOnline2013a)
 News of the hotel has attracted intense interest from foreign media. But it has so far encountered a cooler reception in Japan – no stranger to quirky technological fads – with little reaction from the public online although the media have covered it in force (BBC2015c)

The last quotation above deserves some discussion, because it complicates the image of Japan presented thus far. The article (BBC2015c), which relates to the Henn-na Hotel, a hotel reportedly run by robots, says that the hotel received a ‘cooler’ reception in Japan in comparison to global media coverage (BBC2015c). This could

be suggesting that the level of media coverage in Britain relating to robots is a result of British interest in robots, rather than Japanese interest. Alternatively, it could be that robots are so commonplace in Japan, that a robot hotel is no newsworthy, which appears to be the interpretation made by the *BBC*, as seen in the subordinate clause ‘no stranger to quirky technological fads’ (BBC2015c), indicating that this is of no surprise to the Japanese.

Another use of rhetoric in the articles is that of provocative language, such as the question ‘Would YOU be friends with a robot?’ (MailOnline2014i). These headlines are designed to elicit a response from the audience, and the story is thus reduced to a knee-jerk response.

Social robots such as Pepper can help with household chores – but at what cost to privacy? (IO2015g)
 World Super Tower: Obama dwarfs Japanese emperor as he charms Tokyo and plays ball with a robot (MailOnline2014a)
 Would YOU be friends with a robot? Human-like droids could banish loneliness and keep the elderly company, experts claim (MailOnline2014i)

Headlines also often ask rhetorical questions, often highlighting a negative aspect of the technology. The language is direct: ‘Will a ROBOT steal your JOB?’, etc. Such language places emphasis on the Western observer, the intended audience of the article, as well as the direct consequences for the audience, as emphasised by ‘JOB’ in capitals. This also highlights the differences between the East and the West: the Western audience is expected to reject robots, whereas the Japanese accept them. The language used to describe many of the robots is also negative, focussing on their outward appearance, which is ‘eerie’ (MailOnline2014h) or ‘terrifying’ (MailOnline2014j):

a trundling, talking, sexually confused robot (DT2005b)
 From an eerie-looking android to a smartphone-controlled dinosaur, Japanese companies are out in full force to demonstrate their robotic prowess (MailOnline2014h)
 the one that looks and talks (in Japanese) like a [sic] eerily realistic woman (MO2015c)

This use of language further reinforces the discourse of fear that permeates articles about robots. In the examples below, the rhetoric employed in the first two is of an increasing pervasion of robots throughout all aspects of life. The second example does this with particular effect, by building up a list of where robots have already taken over.

First it was robots making ice cream, then you had robots selling coffee machines, now developers in Japan have created a robot that can advise customers on their finances (IO2015b)

Six signs the machines are about to take over (IO2015b)

For years, experts have warned that robots could soon take over our jobs – and for bank workers in Japan, this threat just became a reality (MailOnline2015d)

If the robots are not an object of fear, then they are often a source of amusement. In particular, the Henn-na Hotel, the robot hotel near Nagasaki, has been reported in British news articles with a lot of humorous language. For example, the 2015 *Mail Online* article sets up expectations for a five-star hotel, before turning them on their head with the robot hotel's offerings (MailOnline2015c). The language of these articles also sets up an expectation that something will go wrong, with the references to classic British sitcom, *Fawlty Towers*, which centres around a bed & breakfast.

Japan's first Robot-staffed hotel: from a dinosaur on reception to a machine offering room service; It's the first of its kind in Japan aptly named the Weird Hotel (IO2015f)

FAULTY towers? Japan opens hotel run by ROBOTS that will welcome guests, carry bags and even clean your room (MailOnline2015c)

Five-star hotels pride themselves on offering cordon bleu food and personal service, but a hotel in Japan may offer a glimpse of the future, because it will be staffed almost entirely by helpful robots (MailOnline2015c)

As well as humour, the language of the articles emphasises the 'weirdness' of Japan, appealing to the Orientalist dichotomy of East and West. This is particularly evident in the decision by the *Independent* to translate Henn-na Hotel's name into English as 'Weird Hotel' (IO2015f). While the Japanese character *hen* (変) can be translated as 'strange' or 'weird', it also means 'unusual', 'unexpected' or 'change', depending on the context, or if it is paired with another Japanese character to form a compound word. The *Independent* article does not acknowledge these distinctions, nor provide justification for its translation, or whether this is an official translation, endorsed by the hotel. This is something that will be returned to in the interviews section of this chapter: what is the meaning of *hen* according to those who run the hotel? There are many other instances of words like 'strange' and other related vocabulary being employed, and the examples below play on the expectation of finding a 'strange sight' in Japan (MailOnline2013a) with one article going as far as to suggest that Japan is not even on the 'same planet' as us (Mail2003).

If you fly to Japan you move eight hours ahead of the UK, but visit the Tokyo Motor Show and you won't be sure whether you're still on the same planet (Mail2003)

FLASHING EYES, plastic pigtails and a tinny voice are not necessarily what a bride and groom look for in their wedding master of ceremonies, unless they work in Japan's robotic industry (I2010)

The strange sight should come as no surprise however, with Japan responsible for more than 50 per cent of the world's robot production (MailOnline2013a)

Moreover, Japan is not only described as being weird in its use of robots, but some articles hint at the possibility of sexual perversion. For example, the Independent reported on a requirement that people would not have sex with the robot if they bought a Pepper unit (IO2015i), though the exact wording of the agreement is not given. Indeed, this is just one item on a list of eighteen 'prohibited' actions, among carrying out illegal activities, infringing intellectual property and copyright, and defamation (SoftBank Robotics 2018).

People buying this robot had to promise they wouldn't have sex with it (IO2015i)

That's right, the country that gave us the creepy cyborg geisha, will now hand the financial frontline over to a non-human (MO2015a)

Could this Geisha android be the very first robot sex doll? (TM2015)

In the quotations above, the latter two quotations refer to 'geisha' robots, though in the content of the articles they make no reference to the ways in which the robots are geisha, beyond being modelled on attractive Japanese women. Rather, it is assumed that because the robots are made to look like Japanese women, they must be intended as geisha. The use of this word, too, evokes stereotypical depictions of Japan, specifically traditional Japan, as geisha are an old-fashioned concept, often used in an English-speaking context as synonymous with a Japanese prostitute, although this is not an accurate translation.

Review

The CDA carried out above has exposed several discourses at play in the discussion of Japan's relationship with robots, which would not have been found through other forms of textual analysis like content analysis. While such analysis would have identified the frequency of references to the ageing population of Japan, as well as references to Japan's purported role as leader in robotics, the variety of language expressed in the articles and the assumptions upon which some statements rest but

are not written mean that an analysis based on keyword frequency or collocation would have been wholly inadequate. Analysis of the sample of articles reveals that Japan (as a whole, indivisible unit, rather than a diverse country made up of approximately 127 million people (Statistics Japan 2018) is obsessed with the idea of robots, and some articles employed language casting it in the light of sexual perversion, such as in the last examples above, or as something 'bizarre'. Articles also reveal an assumption that robots are already commonplace in Japan, with many beginning with the unsubstantiated claim that Japan is the world leader in robotics. This is not to say that the claim is untrue, however, but the articles offer no evidence to back it up, and it is treated as a commonly accepted fact. This claim will be tested in the fieldwork section, through a combination of statistical data, observations and interviews. Lastly, Japan is shown to be dependent on these robots due to its ageing society who need robots to care for them, but also to take up jobs due to a shrinking workforce.

The characterisations of Japan are typical of Techno-Orientalist discourse, rather than traditional Orientalism. While Japan is regularly othered, as seen in the analysis above, Japan is not shown to be backward, but rather its difference lies in how far ahead it is technologically. In keeping with Saidian Orientalism, however, is the sense of Western superiority: articles often write about robots with a sense of fear or suspicion, even if it is portrayed in a humorous way, and suggest that 'we' (as Britons) would not allow such a thing to happen. Indeed, the use of language casting Japan as strange or bizarre suggest that Japan is seen as too technologically advanced, in line with the Techno-Orientalist portrayal of Japan as *hyper*-technified (Lozano-Méndez 2010, 183). This section has shown that Japan is characterised by stereotypical and Techno-Orientalist attitudes and assumptions, but this identification does not disprove the depictions of Japan and the role of robots therein. To assess the accuracy of the articles further methods in addition to CDA are thus necessary, and the next section of this chapter describes the fieldwork carried out in Japan on the current state of humanoid and customer-facing robots in the country.

Section Two: Observation & Interviews

The CDA in the previous section demonstrated that articles about robots in Japan are filled with common assumptions about both robots and the Japanese. It is taken as common knowledge that Japan is home to robots, and the country is often described

as being futuristic. Articles root the claimed wide diffusion of robots in the country's culture, as well as a consequence of the ageing population, similar to explanations for the retention of fax. Moreover, Japan is depicted as not only having robots, but as being obsessed with them, to the point of fetishism.

In addressing the third subsidiary question in relation to this example technology and whether there is evidence to support the depictions of robots in Japan found in newspapers, this section examines data that was gathered first-hand and compares the findings to the depictions from section one. Fieldwork for this example technology took place during the second fieldtrip in October 2016, which was split between Tokyo and Sasebo, near Nagasaki. Observation work was carried out by visiting locations where robots were purported to be in use. In addition, interviews were carried out with robot manufacturers, as well as companies making use of robots. The purpose of these interviews was to determine the extent to which the news articles' reports about robots in Japan conform to the situation as described by the manufacturers and the users themselves. Any discrepancies that have arisen in the course of this fieldwork will be considered and explained.

Before the fieldwork was carried out, initial data-gathering was carried out through searches of publicly-available resources, such as the websites and online databases of the Japanese Statistics Bureau (Statistics Japan) and the International Federation of Robots (IFR). These websources were able to provide useful, quantitative figures as a starting point for the research.

Many articles in the sample worked on the assumption that Japan is the world leader in robotics, but how does this stand up to statistical information? According to IFR, this was the case up until 2010, when Japan was overtaken by South Korea (Republic of Korea), and Japan's robot density is in fact declining (IFR World Robotics 2017). The table below (Figure 5.1) shows the number of installed industrial robots per 10,000 employees in the manufacturing industry as of 2017. Japan occupies fourth place, below South Korea, Singapore and Germany. Although not the focus of this thesis, industrial robot figures have been included here because they are the most common type of robot, used in manufacturing across the world. In terms of customer-facing robots, the kind of robots chosen for this thesis, data was unavailable for Japan specifically, and was only available for general regions (IFR World Robotics 2017).

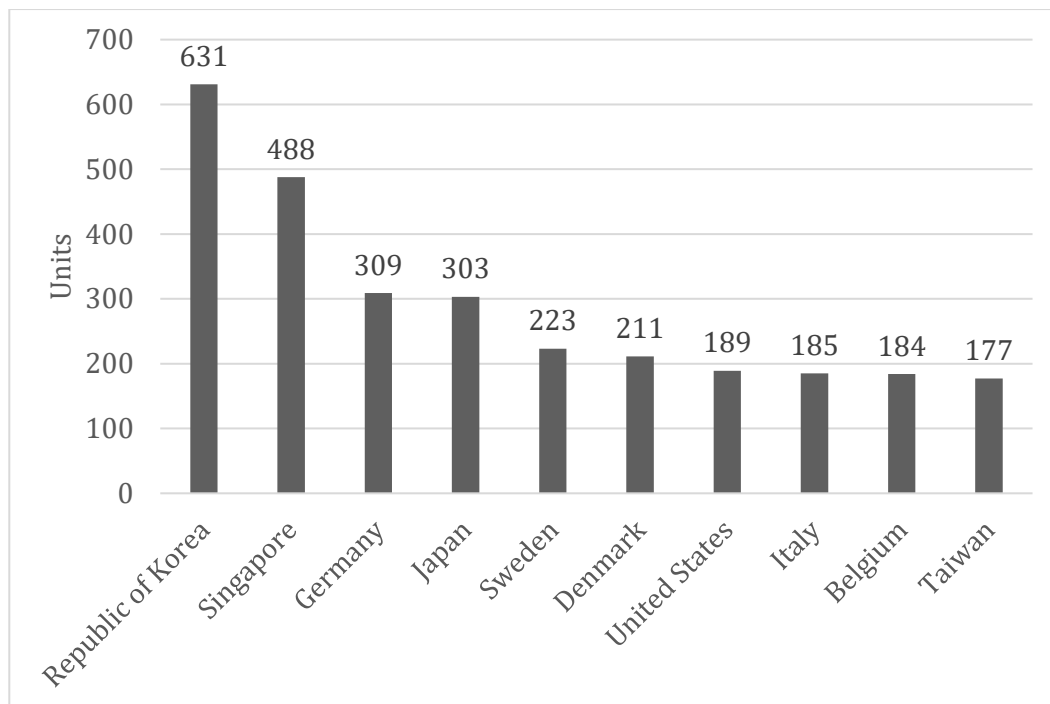


Figure 5.1 Top Ten Countries for Number of Installed Industrial Robots per 10,000 Employees in the Manufacturing Industry (IFR World Robotics 2017)

Regardless, as Figure 5.2 shows, Asia (which includes Japan, as well as South Korea and Singapore, which currently outrank Japan in terms of robots) is behind both Europe and North America in terms of the number of manufacturers of service robots (both for domestic and professional use). This would suggest that Japan is not the leader in the development of these kinds of robots, as it once was with industrial robots. While it was not heavily emphasised in the articles, some of the news articles in the sample acknowledged that the robots Pepper and Nao were developed by a French robotics company, and SoftBank bought the company.

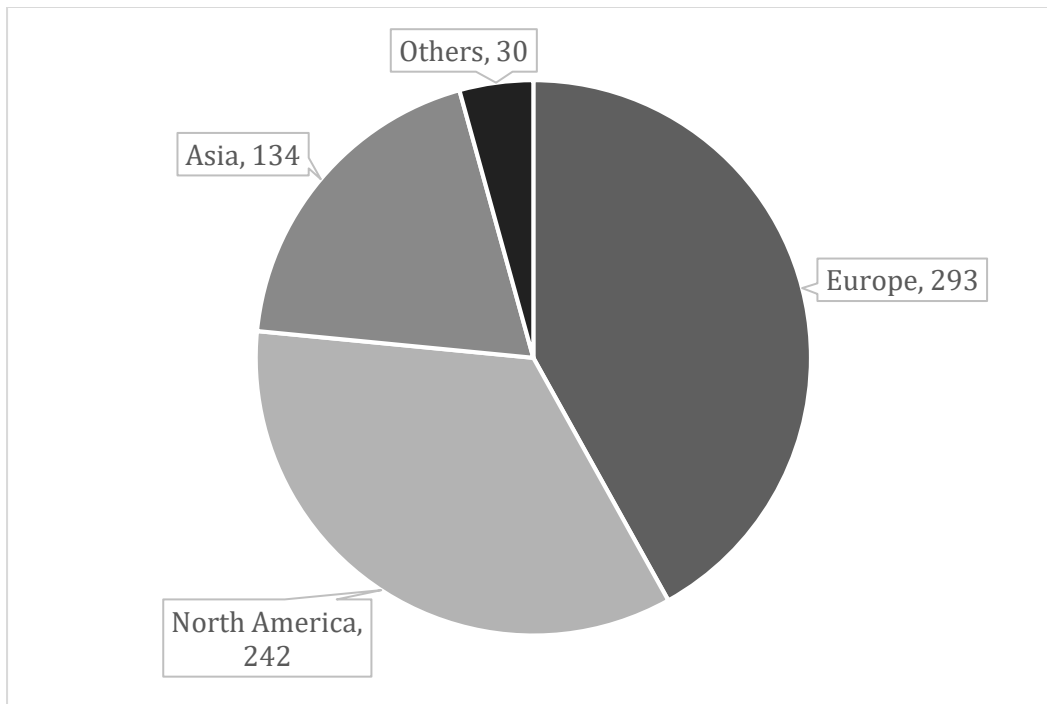


Figure 5.2 Number of Service Robotics Manufacturers of All Types (Professional and Personal/Domestic Use) by Region of Origin (IFR World Robotics 2017)

Furthermore, not only is Japan not the leader in the production of customer-facing (service) robots, according to the IFR, Japan lags behind other countries in terms of sales, too, as can be seen in Figure 5.3, below. The IFR's World Robotics Report 2017 does note two exceptions, however, that 60% of entertainment robots and 94% of elderly and handicap assistance systems are supplied by Asian companies (IFR World Robotics 2017).

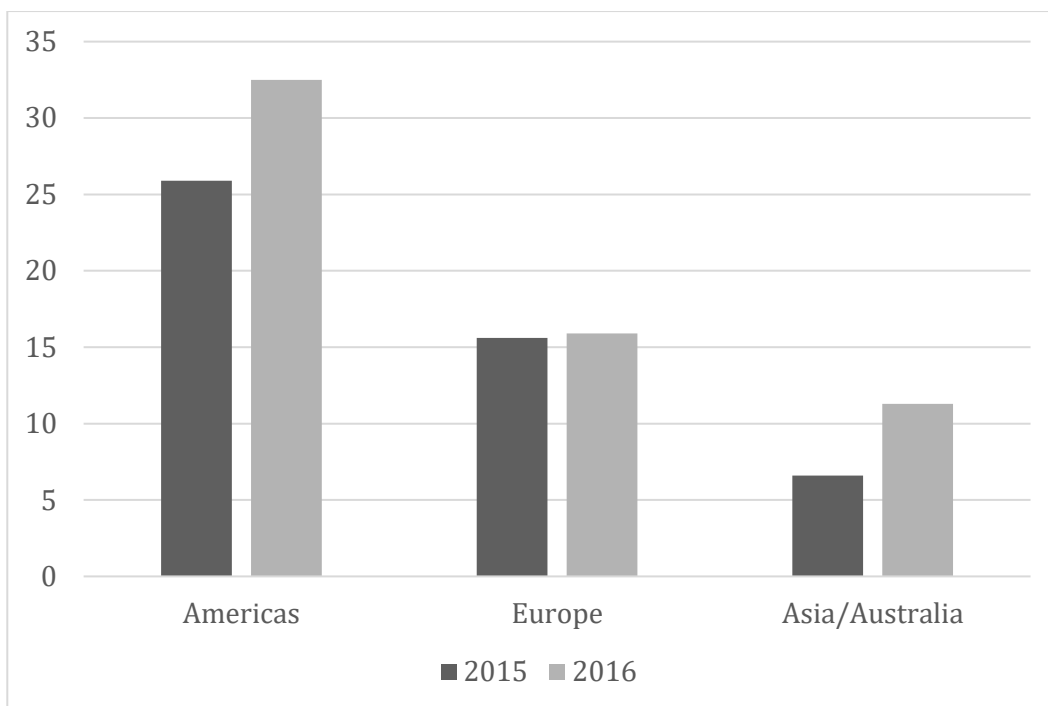


Figure 5.3 Service Robots for Professional Use. Unit Sales 2015 and 2016 by Region of Origin (IFR World Robotics 2017)

Taking this data into account, it would appear that articles in the sample up until 2009 would have been right in their assertion that Japan led the way in robotics, but after this point the assumption that Japan is world leader has gradually become less and less true, particularly given the declining robot density of Japan (IFR World Robotics 2017). Articles towards the end of the timeframe, then, appear to rest on outdated information about Japan; however, the statistics above do not consider Japan on its own. Moreover, while robot density is declining for industrial robots, this might not be the case for customer-facing robots.

Statistical data on robots worldwide shows that Japan is not the forerunner in robotics, as articles might suggest, but there is insufficient data available to describe the situation in Japan with regard to customer-facing robots specifically, these being the focus of this example technology. The fieldwork was thus structured around the filling in of these gaps, utilising the remaining two methods of this study: observation and fieldwork. Whilst their individual sections will provide more precise details about their organisation and the data obtained, a brief overview will be given. Observations were carried out of robots in use in Japan, at locations mentioned in news articles, as well as at technology trade shows and public installations, in order to see how their implementation compared to the depictions found in the news articles. Interviews were also carried out with manufacturers of robots in order to

learn about their perceptions regarding the current capabilities and diffusion of robots, as well as interviews with companies reported to be using robots, and the companies' perceived successes of these robots.

This section will thus begin with a discussion of the observations carried out, drawing upon the claims made in news articles and the author's own findings. After this, discussion will move onto the interviews and an analysis thereof. Lastly, these strands of research will be drawn together in the conclusion of this chapter, which will consider differences between news representation of robots in Japan and the fieldwork.

Observation

The second fieldtrip, which took between the 1st and 10th of October 2016, included periods of observations of robots in use in Japan, targeting robots frequently mentioned in the sample of news articles. The majority of the fieldwork was carried out in Tokyo, and while this is not representative of the country as a whole, if robots are in use it is likely that they will be in use in the capital city. Furthermore, news reporting tends to focus on Tokyo, so these observations are testing these representations.

Many news articles imply already widespread usage of robots in Japan, and observations were carried out at locations typical of this, based on the analysis of news articles. In the case of Pepper, the robot is purported to be used in SoftBank stores throughout Japan, as well as a number of electronics department stores and other retail locations. In addition to Pepper, among service robots commonly mentioned in the press were the robots used at the Henn-na Hotel. Similarly, robots are often linked to Japan's increasing elderly population, and robots have been described as carers for the elderly.

These different usages formed the basis for the different observations that were carried out during the fieldtrip: observation of Pepper units in SoftBank stores and other retail stores, observation of robots at the Henn-na Hotel, observation of robots involved in elderly care, and observation of new guide robots. In addition, a visit was made to the annual technology trade show, Combined Exhibition of Advanced Technologies (CEATEC), held annually at the Makuhari Messe convention centre in Chiba, near Tokyo. Japanese manufacturers typically unveil and demonstrate their latest developments at this show, including robots.

Pepper



Figure 5.4 Pepper Units at a Department Store in Tokyo

Pepper is produced by SoftBank Robotics (formerly Aldebaran), the robotics arm of the SoftBank Group, which is primarily known for telecommunications, including landline communications, broadband Internet and mobile communications (as a mobile network). According to news articles, Pepper is available at SoftBank's mobile phone retail stores (BBC2014d). Observation of Pepper units was carried out at a number of different SoftBank retail stores as well as department stores across the Tokyo Metropolitan area. SoftBank provides no single list of locations where Pepper robots are in use, even in official SoftBank stores. In advance of the fieldtrip, SoftBank were contacted requesting such information, but the author received no replies. It was possible to compile a list manually, however, by using the SoftBank website's store location finder (SoftBank 2018). After narrowing down by region it is possible to filter stores which have 'Pepper service'. According to this, of the two hundred and forty-seven branches in the Tokyo area, only fourteen have this 'Pepper service' (SoftBank 2018). From this it is not immediately obvious whether it means that Pepper units are installed in store for customer interaction or that Pepper units are available for purchase. In either case, the number of branches with services is still considerably low given the high media coverage for the robots.

Of the robots observed by the author, they were largely inactive. In one department store, the Pepper unit was flanked by two human staff, negating the need for an operational robot entirely. Moreover, the Pepper unit at a SoftBank store seemed to

be more of a novelty, exemplified by its offer to sing a song for the author. Indeed, the robots largely appeared to be installed as a way of drawing the attention of potential customers, rather than actual use, but without speaking to the companies using Pepper robots, the author can only speculate about the exact use of the robot and the success of this, thus necessitating interviews.

Henn-na Hotel

The Henn-na Hotel is a hotel located just outside the theme park Huis Ten Bosch in Sasebo, near Nagasaki in Japan. The hotel is notable for its use of robots to automate many aspects of the hotel's operation. The hotel opened in July 2015, and in 2016 had a second grand opening, following the completion of its second wing (Huis Ten Bosch 2016). The Henn-na Hotel was widely reported in English-language news across the world, many articles picking up on its name, which can be translated as 'strange' or 'weird' hotel. It was also covered in the British press, as can be seen in the above section on CDA. Journalists focussed on the 'strange' aspect of the hotel, drawing attention to the dinosaur receptionist robot and the concept of the hotel as a whole. The CDA found that reporting of the hotel often had a humorous tone, particularly in the *Daily Mail* (MailOnline2015c). However, rather than focussing on the language or discourse, attention will now be paid to the specific claims about the hotel. These articles imply that the hotel is staffed entirely by robots, and the *Mail Online* says this explicitly in an article (MailOnline2015c). Other articles do state that some human staff are required to oversee activities and step in if there are any problems, but list the many roles the robots are able to carry out, including: check-in, room service, bag carrying, and room cleaning (IO2015f).

As part of the observation component of this example technology, the author stayed in the hotel, in order to verify the claims made about the features of the hotel. The robots at the reception desk were found to be animatronic figures, rather than robots, and check-in was carried out at a computer terminal, where one entered one's reservation details and a key card was dispensed. Machines were available to carry one's luggage, but only to rooms in the main building, and the description of the machines as robots demonstrates the ambiguity of the term as they were more accurately electric cage trolleys which could navigate a pre-programmed route. There was no room service available to the author, and the restaurant described in the articles was a row of vending machines, albeit those that could dispense hot food.

Lastly, the hotel room was not cleaned by robots, but by human staff, who were observed moving through the wings, tidying and changing bed linen. There were, however, robot lawnmowers keeping the grassy areas around the hotel wings neatly trimmed.

CEATEC

CEATEC is an annual technology trade show in Chiba, near Tokyo, which showcases the newest innovations from Japanese technology companies. CEATEC has featured in British news articles about robots, showing how Japan leads the way in robotics technologies (MailOnline2014j). The author visited the trade show during both fieldtrips, in October 2015 and 2016. However, at both the 2015 and 2016 CEATEC expos, robots were not the main focus for the show. While they were present, in both years there was an emphasis on software over hardware, particularly IoT (Internet of Things) software. IoT as a concept is the idea that household appliances and electronics will all be connected to the Internet, giving one the ability to control one's air-conditioning from a smartphone app or be able to check remotely if there is any milk in the fridge. The idea here is that smart technology will become ubiquitous and interconnected, and this extends to robots too.

Of the robots on show, for the most part they were given small stalls within a company's wider zone. For example, the telecommunications company NTT had its Sota communications robot on display, but the focus was on how it would connect to the cloud in order to retrieve information. There were two exceptions at the expo: Omron's table tennis-playing robot, and Toyota's Kirobo Mini, the latest iteration of the Kirobo robot, mentioned in the sample of news articles. Among the robots seen was also a range from toy company Takara Tomy, who were showing off communication robots for children. The text on the displays highlighted the company's vision for 2020 where one will be 'living with robots'.

Care Home Robots

A tour of a care home was also carried out at a care home promoted by Kanagawa Prefecture for its use of robots as a model of robot-assisted elderly care. A common theme that emerged in the news articles about robots in Japan was Japan's ageing population, and often a link was made between the changing demographics and the

development of robots. Across the entire date range, from 2000 to 2015, articles have written about robots developed for care home use, such as Paro, a robot seal pup or Robear, a robot that looks like a cartoon bear. While Robear was only introduced in 2015, in the final year of the sample (RIKEN 2015), Paro has been around since 2004 (Griffiths 2014), and its appearance in articles about robots in Japan throughout the whole of the sample would indicate some level of success. This trip to a care home was thus designed to assess the degree to which the image of robot-assisted care portrayed in the British press was accurate.



Figure 5.5 PALRO Quizzes the Residents of the Care Home

The tour featured an observation of the use of the robot PALRO, a communications robot. The foot-tall robot stood on a table and residents sat in chairs arranged in a semicircle around it. During this session, the robot gave the residents a trivia quiz, did a dance routine and then led a group exercise, involving various stretches. Throughout this a carer acted as an intermediary between the robot and the residents: he repeated quiz questions for them and then relayed their answers back to the robot. He also encouraged them to follow the movements during the exercise. The residents did not appear particularly interested in the robot, instead paying more attention to the human carer. In terms of its real usefulness, then, the robot was more of a novelty or entertainment source, rather than providing any kind of replacement for human staff.



Figure 5.6 Paro, a Robotic Seal Pup, Designed for Companionship

The care home also had a Paro robot, but it only had two, which had to be shared between the residents, who took turns looking after it. Paro is a robot that is evidently well-received by the elderly, offering similar calming and soothing effects to stroking a real pet, without any of the inconvenience. The author visited the resident who was then looking after a Paro, and she was quite content with it on her lap, patting its back as it occasionally made a noise. The comparison of Paro to a pet is appropriate, as the robot wore a collar-like nametag—each Paro has a name—and the residents are put in charge of looking after it.

While the observation shows that there are robots being used for the care of the elderly, it is important to consider the representativeness of this example. As the care home is used as a model for future care homes, it would suggest that many care homes might not even have a Paro at all, or any other kind of robot. According to the manufacturers, in 2014 (the most recent statistics available) there were approximately 3,000 Paro robots in use in over 30 countries around the world (Griffiths 2014). Even if a significant number of these robots were being used in Japan, given that Japan's elderly population (defined as sixty-five and above) now exceeds thirty-four million people (Statistics Japan 2018), relatively few people are benefiting from them.

Robots as Guides



Figure 5.7 A Tourist Asks EMIEW3 for Directions at a Trial in Tokyo Station

During October 2016 Hitachi ran a trial of their EMIEW3 robot at the JR East travel office in Tokyo Station. EMIEW3 has been promoted as a guide robot, able to give people directions and show them to their destination as it travels on its roller-skate-like legs. The robot has featured in news articles outside of Japan as it has already been trialled at Haneda Airport in Tokyo (Hitachi 2016). The trial involved having members of the public asking the robot for directions. In this case, the robot did not deliver the instructions by speech, and instead a map was displayed on a television screen behind the robot, and nor did it take people to their destination, as the robot was mounted on a plinth. An interview with a technician present at this trial revealed that the robot is still very much in the testing phase, and that the robot was not being trialled anywhere, with the exception of the airport and the train station, which are highly controlled settings (Hitachi Interview 2016).¹⁵ The technician said that it would be a while before the robot was ready for wide use, though it is intended for the robots to be used during the Tokyo Olympics in 2020. References to the Olympics were found in the CDA, and several articles mentioned the desire of Prime Minister

¹⁵ This interview was not part of the original sample and was only brief, so has not been included in the main list of interviews.

Shinzo Abe to hold a kind of robot Olympics at the same time as the regular Olympics (Sky2014c).

Another robot was also observed in use as a guide: Toshiba's Chihira Junco. The Chihira robots featured in multiple articles in the sample. At the time of writing, the robot is currently being used in AQUA CITY shopping centre in Odaiba, near Tokyo, at an information point, and is able to give information about shops and restaurants in the centre, and give directions. The shopping centre does not promote the fact that there is a robot guide, and there is no signage pointing to it. While a few people stopped to have a look at the robot and interact with it, most people paid it no notice. There are several possible explanations for the robot being ignored: that it has become a normal part of the shopping centre, that people in the shopping centre already know their way around, or that the robot is less convenient than a map.

These observations suggested that while robots were certainly in use, they were restricted to certain locations and to specific, limited functions. What observations cannot do, however, is provide information about the development of robots, their sales, and the motivations of the companies who choose to use robots. This is the benefit of the multimodal approach of case study research, as the data obtained during observations can be augmented with other methods. Thus, in addition to observations, interviews were carried out in order to gain additional insights into the use of robots, through interviews with robot manufacturers, and then with robot users, those companies using robots in customer-facing roles.

Interviews with Robot Manufacturers

Interviews with robot manufacturers were carried out as semi-structured interviews. While some questions were written with the specific manufacturers in mind, the same core questions were used in both interviews. As the interviews took the form of conversation, questions were not always asked in the order they were written (see Appendix 4), and depended on the responses given by the interviewee. Sometimes, too, if the interviewee brought up a point that had not been considered in one of the prepared questions, the author asked a question spontaneously. The core questions were grouped around three lines of questioning:

1. The current state of robots
2. The reception of the public and the media to robots
3. The future of robots

Each line of questioning was intended to address the claims made about the state of robotics in Japan (specifically the use of humanoid robots in a customer-facing role), as well as the implicit assumptions that are not necessarily written, but are still nevertheless present, as shown by the CDA. Firstly, many articles rest on the assumption that Japan already has widespread usage of robots, and that robots in their current state of development are ready for large scale implementation. Secondly, while articles report on the implementation of robots, they do not always discuss how robots are actually received in Japan, resting on the assumption that they are instantly accepted. Lastly, as robots are continuously being developed, and news articles continue to report on new implementations of robots, the third line of questioning focusses on the future of robots: what are the next stages of their development? Are they a replacement for human workers, as some British news articles suggest?

Appendix 4 features an interview methods table, which describes the interviews carried out, split between the two categories of interview: Category 1, which was interviews with robot manufacturers, and Category 2, interviews with companies known to be using robots, based on those written about in the sample of news articles. The table describes how each interview was carried out, its duration and how it was recorded.

This section will begin with a discussion of the interviews in Category 1, including their aims, profiles of the interviewed company and analysis of the results. Similarly, the discussion of the interviews in Category 2 will follow the same structure.

Toshiba

The electronics company Toshiba is perhaps best known in the UK for its computing and audio/visual equipment. The company has a history dating back to 1873, and during its history has produced telegraphic equipment, heavy machinery, computers, and semiconductors (Toshiba 2018). In terms of robotics, Toshiba is primarily known for its industrial robots, developed by subsidiary company, Toshiba Machine (Toshiba Machine 2017). In 2014, however, Toshiba announced the development of a humanoid communications robot, based on its own robotics research as well as with collaboration from Osaka University in the creation of human-like appearance (Toshiba 2014). The robot, which has been called Chihira, exists in two iterations: Aico and Junco. The difference between these is that Junco is newer, with more

advanced movements and programmed with multiple languages (Kameda 2015). Notably, the robot has a human-like appearance, more akin to a mannequin than a machine, with artificial skin, hair and clothing. The Chihira robots thus differ substantially from robots like Pepper in that there has been a conscious decision to make Chihira look less like a robot, and more human instead.



Figure 5.8 Chihira Junco Robot Installed at an Information Kiosk in AQUA CITY, Odaiba

In terms of the current state of robotics, as it stands the robot is not currently in common use. According to the interviewee, by and large it is used at one-off events and shows (Toshiba Interview 2016). The permanent use of it at an information kiosk in a shopping centre is an exception.

On the reception of the robot, news articles have often picked up on the fact that the robot resembles a Japanese woman. According to the interviewee, the robot *is* Japanese. That is, it was important that the robot resemble a Japanese woman for the purposes of establishing a relationship between the robot and those who interact with it (Toshiba Interview 2016). The interviewee believes that the Japanese are more readily able to accept robots than those from other countries, it being part of the culture (Toshiba Interview 2016).

Unlike robots like Pepper, Chihira Junco currently has no artificial intelligence (AI), so cannot answer questions. Rather, interaction is confined to a touch panel next to the unit. According to the interviewee from Toshiba, AI will be introduced into the next unit, which as of 2017 is being tested (Toshiba Interview 2016). Thus, while the capabilities of the robot are limited at present, the aims of an AI-embedded communications robot are considered to be within reach.

Toyota

Toyota have been developing robots since the 1970s, beginning with industrial robots, before starting to develop partner robots in 2000 (Toyota 2018). These robots have been developed for a number of purposes, including care assistance, housework assistance and so on. In 2013 it was revealed that Toyota had been working with the University of Tokyo and the Japanese space agency, JAXA, to develop a robot astronaut (Kibo Robot Project 2013). This robot, dubbed Kirobo, was created to 'solve the problems brought about by a society that has become more individualized and less communicative' (Kibo Robot Project 2013). To test the robot, it was sent to the International Space Station (ISS) in order to be a communication partner for the only Japanese astronaut on the ISS at the time. As was seen in the analysis of news articles in the first part of this chapter, the sending of Kirobo into space attracted a lot of press attention.

At Japan's largest technology expo, CEATEC, in 2016, Toyota unveiled a new iteration of the Kirobo robot, the Kirobo Mini. At 10cm high (see Figure 5.9, below), the Kirobo Mini is considerably smaller than the original Kirobo (34cm) and has been designed to go on general sale to consumers.



Figure 5.9 Toshiba's Kirobo Mini, Unveiled at CEATEC 2016

Kirobo Mini was only announced during the fieldtrip for the example technology, and as such, there were no news articles featuring it within the sample timeframe. However, upon its unveiling the robot immediately received international news coverage. While these articles fall outside the range selected for CDA in the previous section, articles on Kirobo Mini are being considered as a special case due to its relation to a robot that was covered within the timeframe, Kirobo. The first articles published in the hours following its reveal, described the robot as simply a conversation partner for people who spend a lot of time driving alone (for work, commute, etc.). Subsequent articles over the next few days would then claim that the robot is a substitute child for childless couples, reportedly capable of stirring maternal instincts. For example, The Independent published an article with the headline 'Toyota unveils Kirobo Mini, a robot baby intended to make lonely people more happy' [sic] (Griffin 2016).

An interview was arranged with a representative from Toyota at the company's exhibition booth at CEATEC. Asked about the robot, the representative confirmed that it was intended as a conversation robot for people while travelling. In terms of the state of technology currently, the robot itself can only do basic conversation, and in general is designed to give phatic responses to the driver so that they do not feel alone, rather than produce any meaningful discussion (Toyota Interview 2016).

Regarding the reception of the robot, while at the time of the interview the robot had only just been announced and thus not on sale to the public, the interviewee was able to comment on the immediate media reception to Kirobo Mini. The interviewee was aware of reports about the robot being used as a surrogate baby, but said that this was not the intention. While the robot is certainly intended to provide a conversation partner to someone who is lonely, it lacks the context of *why* that person is lonely, namely because they are driving home from work with no one to talk to (Toyota Interview 2016). Indeed, the article in *The Independent* (Griffin 2016) makes no reference to the intention for the robot as a car accessory, not even the carry case signed to fit into a car drinks holder. Instead the article focusses on Japan's population decline 'where falling birth rates mean there are fewer and fewer children', and suggests that Kirobo Mini is intended to fill this gap (Griffin 2016). A *BBC News* article addressed these claims, pointing out that Toyota themselves have not explicitly said this (*BBC News* 2016). The article does not, however, dismiss the claim entirely and considers this potential use for the robot, quoting robotics expert, Prof Dautenhahn, who said that a robot could not be a child substitute and that the suggestion was 'offensive' (*BBC News* 2016). Though *BBC News* does not follow other publications in labelling this as the intended function of the robot, by not wholly dismissing the claim and embellishing it with soundbites from authorities in the field, the article gives credence to the idea that people in Japan may buy the robot for this purpose.

The interviewee said that the Japanese had a long history with robots and were thus more likely to accept them than in other countries, citing robots from popular culture, such as Doraemon and robots in anime (Toyota Interview 2016). However, with regard to the future of robots, when asked about Kirobo Mini and robots that have come before it and other robots in development, the interviewee said that the focus was different. While other communications robots have many features, when developing Kirobo Mini the intention was to concentrate on conversation only. Moreover, the interviewee referred to Kirobo Mini as a '*hikimono*', translating as gift

or present (Toyota Interview 2016), indicating that the robot is seen as more of a commodity, compared to other robots like Toshiba's Chihira robot line, which has been developed to perform specific functions and fill consumer-facing roles.

Coding and Analysis of Manufacturer Interviews

The responses from these interviews have been summarised in Table 5.1, below, with the questions divided by the three lines of questioning established above. Examples of the questions asked have been given, although these are not exhausted, and a full list of questions asked in these interviews can be found in Appendix 4, at the end of the thesis. Following each response, it is indicated which interviewee gave the answer within parentheses. In some cases, similar answers were given by both interviewees, which can be seen within the parentheses. The far-right column, coding, has sorted these responses into preliminary categories, following the method of axial coding, established in the methodology (Chapter 3).

Line of Questioning	Responses	Coding
Current State of Robots <ul style="list-style-type: none"> • How is your robot different? • What advantages do robots have? • What disadvantages do robots have? 	The robot looks different to previous robots – realistic appearance (Toshiba) Robots do not need salaries (Toshiba) The robot is incapable of conversation (Toshiba)	Cost-cutting Realism Limited interactivity
Reception <ul style="list-style-type: none"> • How have the robots been received? • How has the media interest been in Japan and from abroad? • Are the Japanese more receptive to robots? 	Surprised by media attention (Toshiba) Attention from both Japan and abroad (Toshiba) Japanese media took interest first, foreign media picked up on story after (Toshiba) Customer satisfaction can still be obtained when robots replace staff (Toshiba) The Japanese like robots (Toshiba) Robots are part of the culture (Toshiba)	Popular in media Capability of robots Japanese fondness for robots Japanese culture
Future of Robots <ul style="list-style-type: none"> • Are robots the future for retail/service? • Will robots offer a solution to Japan's workforce problems? • What are your priorities for development? 	Communication abilities (Toshiba) Usage will increase (Toshiba) Robots are important within the context of the decreasing working population (Toshiba) AI development is a priority (Toshiba)	Greater interactivity Wider usage Robots as answer to workforce problems AI as focus

Table 5.1 Preliminary Coding of Robot Manufacturers' Responses

Current state of robots

At the time of writing the robots discussed in interviews are still being developed to varying extents: Kirobo Mini went on sale in mid-2017, and is part of Toyota's larger robotics and AI development plan; the Chihira robot has gone through several models and Toshiba are continuing to develop the robot's capabilities, and while the robot is in permanent use at the shopping centre in Odaiba, the company has no current plans to sell the robot; only Pepper is in widespread circulation, driven in part by SoftBank's own use of the robot in its retail stores, but even Pepper is in active development. As such, while these robots are all in use to different degrees, robots are not yet ubiquitous in Japan, even in Tokyo. There is, however, a difference between the current robots in use, and those that have come before. While newspapers have looked to Japan as a robot kingdom for years, the actual capabilities of the robots are only now being reflected in reality. In the case of Toshiba's robot, Chihira, the company has achieved a realistic human appearance, which was not possible with earlier robots.

Even with all these advances, there are still limitations for the robots, and manufacturers were willing to acknowledge this. The Toshiba representative said that the Chihira robot cannot carry out a conversation, and at the shopping centre interaction is limited to making requests via a touch screen. As for Toyota's Kirobo Mini, while at the time of the interview the robot had not been released to the public, the robot was intended for general release, and not just a proof-of-concept or something still needing testing. The robot is, however, limited to conversation only, although this is less of a limitation and more a result of the robot's intended use as a conversation partner (Toyota Interview 2016). The Kirobo Mini was released in early 2017 with a price of approximately £300 (Toyota 2016), which is considerably more affordable than the cost of the more business-oriented Pepper, which costs approximately £1,000 (Clark 2014).

Reception

Both robots have received significant press attention, both domestically and abroad. Japanese media will pick up on these stories first, before being reported by international media. The news articles about these robots demonstrate the differences in reporting of the robots in Japanese media and foreign media. In the case of the Chihira robot, what caught the attention of the Japanese media was that

the robot was being used in one of Japan's oldest department stores, highlighting this juxtaposition of old and new, whereas foreign articles focussed mainly on the technology itself. For the Kirobo Mini, what is most striking is the difference between what was said at the unveiling and in the information provided at the booth at CEATEC, and the way the robot was described in the press. From the interview, it appears that Toyota are aware of the way in which the robot has been exaggerated by the press, but the interviewee clarified the functions and purpose of the robot (Toyota Interview 2016). To the author's knowledge, however, Toyota have not responded to press reporting about Kirobo Mini directly in any of their press release.

According to the representative from Toshiba, customer satisfaction can be achieved through the use of robots. Citing the Henn-na Hotel as an example, he said that while the numbers of human staff have decreased at the hotel, levels of customer satisfaction have increased (Toshiba Interview 2016).

The Toshiba interviewee also spoke of the Japanese attitude towards robots, including a national 'objective' to steadily increase the number of robots in Japan (Toshiba Interview 2016). Given the declining working population of Japan (Statistics Japan 2018), this would appear to be a rational decision, rather than one based on an obsession with robots.

However, both interviewees commented that robots have long been a feature of Japanese pop culture, such as in manga and anime, and the Japanese generally like robots (Toshiba Interview 2016; Toyota Interview 2016), though the Toshiba interviewee said that there are people who prefer things to be more 'analogue'. He suggested that Toshiba's robot was a robot that could be more readily accepted by those who preferred the analogue world, since it resembles a human woman, whereas robots like Pepper are more 'digital' (Toshiba Interview 2016). Both interviewees demonstrated a degree of Self-Orientalism in their discussion of Japan's unique affinity for robots, explaining that Japan's robotics industry was the result in robots being a part of Japanese culture and as such the Japanese were more willing to accept robots into their lives, compared to those from other countries.

Future of robots

While the abilities of Toshiba's Chihira robots are limited at the time of writing, the Toshiba interviewee acknowledged these limitations, but said that the company was working on introducing new features in the next iteration of the robot, intended for unveiling at an undisclosed point in 2017. These new skills would be namely

enhanced communications, through the implementation of AI, allowing for the robot to understand questions posed to it and be able to respond (Toshiba Interview 2016). While the Kirobo Mini is also limited, its limitations are different as the robot is capable of communication with humans, and the interviewee said that this is part of what makes the robot different (Toyota Interview 2016).

The Toshiba interviewee was confident that robot usage will increase, framing with within the specific situation Japan currently faces: the increasingly ageing population, and the consequent decreasing working population. Meanwhile, the Toyota interview did not comment much on the future of robots, although this is potentially because the Kirobo Mini had not yet been released, and so the company was not ready to comment on future developments.

Following the initial axial coding carried out in Table 5.1, these categories have been reduced further still to three main categories of response, seen below in Table 5.2:

Coding	Response Type
<i>Limited capabilities at present</i>	Robot is incapable of conversation (Toshiba) Robot is capable of conversation only (Toyota)
<i>Japanese culture</i>	The Japanese like robots (Toshiba, Toyota) Robots are part of the culture (Toshiba, Toyota)
<i>Future capability of robots</i>	Usage will increase (Toshiba) AI development is a priority (Toshiba)

Table 5.2 Final Coding of Robot Manufacturers' Responses

By reducing the categories identified in the initial coding down to just three categories, it is possible to examine the main themes to have emerged from the interviews. Firstly, robots, while in use currently, are a technology very much still in development and are not capable of every conceivable function. In the case of Chihira, interaction is limited to a computer interface, but the robot has advanced movement, whereas Kirobo Mini is only capable of voice communication. Moreover, Chihira robots are in use in limited locations and often on a trial basis (Toshiba Interview 2016), and while the Kirobo Mini has been designed for general sale, it is being released as a gift product (Toyota Interview 2016).

Secondly, interviews corroborated with the news articles' association between Japanese culture and robotics. While, in the articles, this was often not made explicit,

but rather was alluded to, both the interviewee from Toshiba and the interviewee from Toyota explained that robots are a part of Japanese culture, and people have grown with characters like the robot cat, Doraemon, and the Gundam franchise (Toshiba Interview 2016; Toyota Interview 2016). Lastly, much emphasis was placed on how robotics will improve in the future, with usage expanding, and more functionality being introduced to robots. According to the Toshiba interviewee, AI is a priority, because Chihira cannot currently answer questions on her own (Toshiba Interview 2016).

From these interviews, it is possible to see differences between the reporting of robotics development in Japan, and the reality of the situation. While the Toshiba interviewee could point to successful implementations of the service robot Pepper (Toshiba Interview 2016), it is apparent that these technologies are still new and still being developed, and as such, robots are nowhere near as ubiquitous as it is sometimes claimed. For example, the Kirobo Mini is not meant to compete with other communications robots, but rather is a travel companion and something that can be given as a gift (Toyota 2016). Indeed, the focus of the Toshiba interview was on the future of robotics and their future capabilities and applicability (Toshiba Interview 2016).

Interviews with Robot Users

Interviews with robot manufacturers can provide information about the state of robot development, the limitations of their current use, as well as their future trajectory, but they provide very little information about the current use of these robots, beyond the manufacturers' own trials. Thus, interviews were also arranged with three companies known to be using robots in Japan, in order to assess the degree to which these robots are actually being used, and the success thereof. Moreover, since a nationwide survey of Japanese people's experiences of robots was infeasible for this study, interviews with robot-using companies could be used to gauge the reception of these robots, through their own market research and feedback.

In selecting the companies for interview, one condition was that their use had been reported by the British media, so that the results of these interviews could be up against the way they were reported in the news. The companies had to also still be

using robots, so decade-old articles discussing older robots such as Wakamaru had to be discounted.¹⁶ Three companies were identified for interview, these being:

- Nestlé Japan, specifically Nescafé, who have been using SoftBank's Pepper robot to sell Nespresso coffee machines in department stores in Japan.
- Henn-na Hotel, a hotel widely reported in British news sources as it is the first predominantly robot-run hotel.
- Huis Ten Bosch, a Dutch-themed park near Nagasaki, which is a popular tourist destination. It has introduced robots into its park under the 'Kingdom of Robots' theme, with attractions, a museum, a shop and a restaurant.

These companies were interviewed about their specific use of robots, the levels of success and popularity they have achieved, and the future of robots within the company. While interviews were tailored to each company being interviewed, they were structured around a core set of questions, divided into three themes, based on those established in the methodology chapter (Chapter 3):

1. Purpose of the robots
2. The reception of the public and the media to robots
3. Current & future usage of robots

These three themes were chosen in order to best address the third subsidiary question of whether news depictions of robot use in Japan could be evidenced. The first theme seeks to explore why robots might be used in the first place, whilst the second looks at whether the public is engaging with robots, given the perceived Japanese affinity towards robots. Lastly, the third theme considers the actual use of robots, as well as the direction in which development is heading. Although interviews broadly followed the set questions, as semi-structured interviews, the format was conversational, allowing for additional questions when required. Below, summaries have been provided of the interviews, which are then followed by an analysis of the answers obtained.

¹⁶ Wakamaru is a robot that features in earlier articles within the sample, but is no longer in active development. For more information about the robot, which was developed in order to be integrated into Japanese society, and even into Japanese homes, see Robertson (2018), whose ethnographic account details the development of robots in Japan with a particular focus on their role in reinforcing gender, social and political norms.

Nestlé

According to news articles, Nestlé have implemented Pepper robots in department stores across Japan for the purpose of promoting Nescafé Dolce Gusto coffee machines and coffee (IO2014c; MailOnline2014k). According to the interviewee, the use of Pepper has been incredibly beneficial for the sales of Nescafé coffee machines in Japan. The interviewee explained that the reason for using Pepper is because staff at electronics stores are not trained to explain the benefits of these coffee machines and know almost nothing about them (Nestlé Interview 2016).



Figure 5.10 Pepper Unit in Use at a Retail Store

News articles obtained in the sample mentioning Nestlé's use of robots were not clear about the extent to which Nestlé are using robots to promote their coffee. In order to claim that robots are commonplace in Japan, it is important to assess the degree to which such usage is widespread. Other robots that have been reported in the news have often been only used for trial periods or in single locations, such as Toshiba's Chihira robot. According to the interviewee, this is not the case with the use of Pepper to sell Nescafé machines and Nestlé are using approximately 1,000 Pepper robots across Japan (Nestlé Interview 2016).

Part of the interview was dedicated to exploring why Nestlé chose to use robots in the first place, since one solution to a lack of knowledgeable staff at department

stores would be to provide training. Was the use of robots encouraged by a third party? According to the interviewee, the company has received no financial incentives for using Pepper, either from Softbank or the government. Rather, the company actively promotes innovation and the use of Pepper is an independent action. Nestlé are, however, working very closely with Softbank to develop features for Pepper, and beyond advice, the unit also offers games to provide a more engaging experience (Nestlé Interview 2016).

Henn-na Hotel

In addition to staying in the hotel, a group interview was conducted with the general manager and other representatives from the hotel. Given the global news coverage of the hotel, the interview began by asking about the name, which British news media had picked up on. News articles noted that the name of the hotel can be rendered in English as 'Weird Hotel' (IO2015f) or 'Strange Hotel' (Kikuchi 2017), using this to emphasise the hotel's apparent weirdness. The hotel itself, however, uses the Japanese name 'Henn-na Hotel' in its English language material. According to the general manager, while called Henn-na Hotel there is a play on words here: the word *hen* can mean weird or strange, but it can also mean 'change'. There is thus an idea of progression, of changing the way hotels are done. This interpretation of the name did not feature strongly in the articles obtained in the sample. Indeed, in the interview, the manager focussed on the interpretation of *hen* as 'change' by referring to the verb *henka suru* (変化する), which means 'to change', and also relating this to the Japanese term for evolution, *shinka* (進化), suggesting that this is the way forward for hotels (Henn-na Hotel Interview 2016).



Figure 5.11 A Dinosaur Receptionist at Henn-na Hotel in Sasebo, near Nagasaki

The hotel features a female humanoid robot and two dinosaur robots at the reception (see Figure 5.11, above). The main reason for having two dinosaur receptionists and only one humanoid robot receptionist is that the dinosaur robots are more popular than the humanoid ones. The manager emphasised that this was an entertainment experience, in keeping with its location in a theme park (Henn-na Hotel Interview 2016). Indeed, the hotel is most popular among families, compared with other demographics (Henn-na Hotel Interview 2016). Aside from the robots, one of the biggest draws is that it is cheaper than other hotels at the park. The hotel has been so popular that they have had to open additional wings, and has opened a second hotel near to the Tokyo Disney Resort (Kikuchi 2017).



Figure 5.12 A Bedroom in Henn-na Hotel, Featuring Tablet Computer and Personal Robot

In terms of the purpose of the hotel, it is not only an experiment to see how hotels can be automated, but also an exercise in cost effectiveness. The hotel is both cheaper for guests, but also cheaper to run overall, since there are significantly fewer staff to pay (Henn-na Hotel Interview 2016). The ITV documentary *Joanna Lumley's Japan* (2016) picked up on the potential cost-saving benefits of robots and an interview with the manager by Lumley appeared to confirm this as the main reason behind the hotel, but in the interview with the general manager carried out for this present study, he said that this was not the primary motivation behind having a robot-staffed hotel (Henn-na Hotel Interview 2016).

When asked about how the hotel had been received by the public since opening, the general manager replied 'good. Very good' (Henn-na Hotel Interview 2016). The hotel's positioning by a theme park is important, and the hotel is thus also a source of 'entertainment' for guests. The general manager gave the example of when guests first enter the hotel and are greeted with the sight of a row of robots, which creates a feeling of 'surprise' (Henn-na Hotel Interview 2016). The hotel has been very successful, particularly with families, as it is the cheapest hotel at the theme park. The hotel has been so well received, that at the time of the interview additional wings had been built and there were plans for other Henn-na Hotels across Japan. Contrary to reporting, however, the manager does not believe that the Japanese are any more receptive to robots. In fact, he thinks that people of other countries are more willing to accept robots, and it is the Japanese who are less receptive.

Regarding the future of robots, the intention is to expand operations, and at the time of the interview, a Henn-na Hotel near the Tokyo Disney Resort was in development. The manager is thus confident in the current state of technology to commit to future developments. When asked about the ability of the robots to deliver *omotenashi*, which describes a level of service in hotels and similar industries and is considered important to Prime Minister Shinzo Abe's vision of the 2020 Olympics, the general manager said that they would like to be able to achieve this in their hotel, too (Henn-na Hotel Interview 2016).

Huis Ten Bosch



Figure 5.13 Huis Ten Bosch is a Dutch-Themed Park, Complete with Windmills and Fields of Tulips

Huis Ten Bosch is a residential Netherlands-themed resort in Sasebo, near Nagasaki, Japan. Specifically, the park recreates a 17th century Dutch town, including a reproduction of one of the Dutch royal family's residences (Visit Nagasaki 2017). Huis Ten Bosch first gained attention in the British press for the Henn-na Hotel, located nearby, but later reappeared in the British press when robots were introduced into the park itself in 2016. News articles in British publications, in their descriptions of the robots at Huis Ten Bosch, set up certain expectations about what one could expect. First, let us consider some headlines for articles about the park:

The end of humans working in service industry? Theme park to open 'robot kingdom' where 200 androids make cocktails and food (Shammas 2016)

Forget Disneyland, Japan set to get 'robot kingdom' where the restaurants and bars are staffed entirely by machines (Liberatore 2016)

The headlines above give the sense of a distinct section of the park, staffed entirely by robots, with an emphasis on food and drinks establishments. The articles then give precise details about what will be featured:

Admission to the robot kingdom is expected to cost \$59.33 for adults and there is no sign of it increasing (Liberatore 2016)

The robots will include a chef that can cook different meals on demand (Shammas 2016)

Guests at Huis Ten Bosch will soon be able to enjoy okonomiyaki prepared by a robotic chef, cocktails made by an autonomous bartender and a complete staff of serving cyborgs (Liberatore 2016)

Also among the incoming robot staff is a bartender that can make 10 different cocktails (Shammas 2016)

Robots will also patrol the area of restaurants and bars, serving drinks and food and even cleaning up when visitors leave a table (Shammas 2016)

This 'robotic kingdom' will feature over 200 androids that attendees can touch and interact with while spending the day at the park (Liberatore 2016)

The idea of the 'robot kingdom' being its own section is reinforced by the admission pricing provided in the *Mail Online* article by Liberatore (2016). The size of it is also alluded to in the description of it as an 'area of restaurants and bars' (Shammas 2016) as well as the large number of robots in use. It is also indicated that there is almost full automation, with robots not only preparing food and drink, but also serving it, and clearing up after guests.

One of the most significant findings of the interview at Huis Ten Bosch was that the 'Kingdom of Robots' (the official translation) is not a separate robot theme park or even a dedicated area within the park, as it has been widely reported. Rather, it is a 'theme' which is incorporated into various zones across the park (Huis Ten Bosch Interview 2016). Confusion likely came from the use of 'Kingdom' in the name, which might suggest it being a physical place. The name itself has nothing to do with the epithet 'Robot Kingdom' that Japan acquired during the 80s and 90s. It is actually a coincidence, and all themes within the park are referred to as 'kingdoms', such as 'kingdom of flowers', 'kingdom of games', and 'kingdom of health' (Huis Ten Bosch, n.d.).

It was widely reported that there are around 200 robots at the park, but it is never explained in articles what is meant by 'robot', which the introductory chapter (Chapter 1) made clear is a term that can be defined in many ways. As for what is meant by 'robot', this was something the organisers spent time considering, too. Their approach was 'what the visitors see as robots', indicating a willingness to adapt to feedback and visitor reception (Huis Ten Bosch Interview 2016). The interviewee confirmed the number of robots, but this does, however, include devices like Segways. Again, this is due to the ambiguity of the term 'robot', and the fact that this is a theme park attraction, so many of the robots are in place for entertainment and are thus not the highly-sophisticated AI units often imagined.

While the 'Kingdom of Robots' got a lot of attention overseas, according to the interviewee (Huis Ten Bosch Interview 2016), the new attractions mostly gained attention from the domestic media (Huis Ten Bosch Interview 2016). It is difficult to measure visits to the 'Kingdom of Robots' specifically as it is not a single zone, the attractions do receive a lot of foreign visitors, but mostly from East Asia (Huis Ten Bosch Interview 2016). This could be explained by the park's location in the west of Japan, which is a lot closer to South Korea and China than other tourist destinations in Japan. Indeed, Nagasaki Airport serves flights to and from Seoul and Shanghai, and features a ferry directly to Huis Ten Bosch (Nagasaki Airport 2017).

The CDA found that across the news sample there is a general assumption that the Japanese have a long-standing relationship with robots, which is in part influenced by Japanese culture. The interviewee at Huis Ten Bosch was asked whether they saw this as an influencing factor in the creation of the zone. The interviewee believed that the Japanese are more willing to accept robots than others. Fear of a robot-filled future is a foreign concept, and it is only foreign news media who bring this up (Huis Ten Bosch Interview 2016). Indeed, the interviewee said that many of the robots are not Japanese in origin, with robots being sourced from across the world (Huis Ten Bosch Interview 2016).

The 'Kingdom of Robots' comprises a museum and exhibition space for robots, though this is not limited to Japanese robotics companies and featured robots from other countries, as well as an interactive movie based on the popular Gundam franchise which centres around robotic suits used for battling. Following the success of Henn-na Hotel, there is now also Henn-na Restaurant, and contrary to news articles, there is only the one restaurant (Liberatore 2016). The restaurant features a personal robot at every table, though its functionality is limited. The restaurant also

has a robot bartender that can make cocktails, which are selected from a touchscreen, as well as an *okonomiyaki* (a type of savoury pancake) making robot, and an ice-cream serving robot. Each of the robots made one specific kind of food, unlike the claims of a robot able to make a variety of dishes. The restaurant is buffet-style, and the majority of the food is brought out from a kitchen by human waiting staff. Despite the level of automation described in news articles, the restaurant is dependent on human staff and there are no robots to take away empty plates.



Figure 5.14 Chef 'Andrew' Prepares Okonomiyaki at the Robot Restaurant

Coding and Analysis of Robot User Interviews

The results of the interviews have been collated into the table below (Table 5.3), and answers have been divided up according to the three lines of questioning. Examples of questions asked in each line of questioning have been included as bullet points, but are not exhaustive (for the complete question list, refer to Appendix 4). The middle column details the responses to these questions, with the interviewee placed in parentheses. If multiple interviewees gave similar answers then they have been grouped together in the parentheses following the answer. As with the previous example technology, responses have been coded following the method of axial coding. In this first stage, common themes have been identified across the answers, and these have been listed in the third column, 'coding'.

Line of Questioning	Responses	Coding
Purpose <ul style="list-style-type: none"> • Why did you start using the robot(s)? • What advantages do robots have? • What disadvantages do robots have? 	Company is always looking to innovate (Nestlé, Henn-na Hotel) Intention was to show how a hotel could be automated (Henn-na Hotel) Existing staff not trained with specific product knowledge (Nestlé) There are roles for both robots and human staff (Nestlé) They received financial assistance from the government (Huis Ten Bosch)	Innovation Filling gaps Co-existence Entertainment
Reception <ul style="list-style-type: none"> • How have the robots been received? • How has the media interest been in Japan and from abroad? • Are the Japanese more receptive to robots? 	Sales have increased since the implementation of robots (Nestlé) 90% of customers are satisfied with the experience (Nestlé) The hotel has been so popular that additional wings have been built, and hotels are to be built in other locations (Henn-na Hotel) Attention has come from media around the world (Nestlé; Henn-na Hotel; Huis Ten Bosch) Interest has also come from the company's own offices abroad, in countries where the robot is not used (Nestlé) Robots are useful for exposure – good marketing (Nestlé) In Japan people believe in a future with robots (Nestlé) The Japanese are willing to accept robots (Huis Ten Bosch)	Positive reactions Global attention Marketing tool Japanese fondness for robots Japanese culture
Current & Future Usage <ul style="list-style-type: none"> • Do you plan to increase the number of robots? • Could robots replace the need for humans entirely? 	Capabilities of robot are constantly being expanded (Nestlé) Intend to continue to expand (Nestlé, Henn-na Hotel) It is natural that robots will penetrate further and the next step is AI (Nestlé) There is a lot that the robot cannot do now, but might be able to in the future (Nestlé) The implementation of robots is intended as only temporary, but could be extended (Huis Ten Bosch)	More functionality Future expansion Further use of robots is natural AI as focus

Table 5.3 Preliminary Coding of Robot Users' Responses

Purpose

This line of questioning was devised in order to understand why companies were using robots, in order to compare the answers of interviews to claims made by news articles. Based on the answers obtained during the interviews about the purpose of each company's use of robots, certain key themes emerged. Following the process of open coding established in the Methodology chapter (Chapter 3) and already implemented in the first example technology, these answers were analysed for shared commonality, and categorised accordingly (see Table 5.3, above). Innovation was a driving factor for both Nestlé and Henn-na Hotel, which actively seek to find new solutions to their respective industries. While the interview with Huis Ten Bosch did not mention innovation explicitly, the Kingdom of Robots is intended to offer a glimpse of the future, such as through the Robot Restaurant, which could be deemed to be showing the potential for innovation. As well as a consequence of innovation, robots are employed for the purpose of filling-gaps. In the case of the Henn-na Hotel, robots take the place of staff, whilst for Nestlé, robots solve the issue that there are no Nescafé experts on hand at department stores to help potential customers. Robots are also in place in order to work alongside human staff, not to replace them outright. At the Henn-na Hotel, there still needs to be human management staff on site to assist with issues, and cleaning of the rooms must still be done by people. Nor is Pepper replacing the need for human staff, as the robot can only give guidance on the ideal coffee machine for a customer, and cannot actually sell the device. Lastly, both the Henn-na Hotel and Huis Ten Bosch use robots for the purpose of entertainment, and even Nestlé have added features such as games to Pepper to make the experience more entertaining.

Reception

While news articles comment on the apparent wide diffusion of robots in Japan, their popularity with the Japanese is assumed and often the Japanese are labelled as robot-loving. This line of questioning sought to find out how robots were actually received. For all three robot users, based on customers' reception obtained through surveys and sales figures, reception to the robots has been positive. The use of Pepper has in fact increased sales of Nescafé machines and surveyed customers said that they were very happy with the service Pepper provided (Nestlé Interview 2016). The robots at Henn-na Hotel have been so popular that additional buildings have been constructed,

and more robot hotels are to be built in other locations (Henn-na Hotel Interview 2016). All three companies received press attention for their use of robots, and this attention came from both domestic press, as well as foreign publications. The interviewee from Nestlé admitted that while the robot Pepper is genuinely useful, its ability to attract press attention makes it a great marketing tool (Nestlé Interview 2016).

Some of the interviewees attributed the success of the robots to a cultural willingness to accept robots in Japan, which is influenced in part by the prevalence of robots in Japanese popular culture. Only the manager of Henn-na Hotel questioned this idea, suggesting that it is foreigners who are more accepting of robots. Indeed, the interviewer said that many guests were Chinese, which echoes the Toshiba interviewee's observation that much of the foreign media interest was from China, Taiwan and Hong Kong. This relates back to the *BBC News* article which said that the Japanese reception had not been as intense as abroad (BBC2015c). However, the idea that the Japanese do have a cultural connection to robots can be used to manufacturers' and companies' advantages, such as the development of robot attractions at a theme park with a high number of foreign visitors.

Current & Future Usage

This line of questioning sought to establish the current capabilities of robots, in order to compare them to news article claims. Moreover, questions were also asked regarding the future of robots, so as to see whether the companies considered them successful enough to be further utilised. Interviews with robot users demonstrate that robots have reached a level of development where they can be used successfully. Interviews with Nestlé and Henn-na Hotel made it clear, however, that there are still things that can be improved. There are certain things that robots cannot yet do, and so this functionality will need to be developed, as opposed to fax machines, where the technology has peaked. For example, the Nestlé interviewee said that AI is the next step, since the robots currently in use do not have this. Both Nestlé and Henn-na Hotel are committed to expansion of robot usage, with more Pepper units to be used by Nestlé to sell Nescafé in Japan, as well as interest from foreign branches of Nestlé to bring Pepper to other countries (Nestlé Interview 2016), and the construction of further robot hotels (Henn-na Hotel Interview 2016). While the Kingdom of Robots at Huis Ten Bosch is intended as only lasting for a fixed duration, as the park cycles

out old themes for new, they will consider future expansion depending on its success (Huis Ten Bosch Interview 2016).

The categories established in the first part of the coding (Table 5.3) can be reduced further still, from the initial thirteen to three main categories of responses in the interviews with robot users, which can be seen in Table 5.4, below:

Coding	Response Type
<i>Innovation and problem solving</i>	Company is looking to innovate (Nestlé, Henn-na Hotel) Existing staff not trained with specific product knowledge (Nestlé)
<i>Global Interest</i>	Attention has come from media around the world (Nestlé; Henn-na Hotel; Huis Ten Bosch) In Japan people believe in a future with robots (Nestlé) The Japanese are willing to accept robots (Huis Ten Bosch)
<i>Future capability of robots</i>	Capabilities of robots are constantly being expanded (Nestlé) Intend to continue to expand (Nestlé; Henn-na Hotel)

Table 5.4 Final Coding of Robot Users' Responses

The coding suggests that the implementation of robots is being driven by the need to address certain gaps or problems existing in the industry through innovation as well as innovation for its own sake. The second final category is global interest. While news articles play on an association between Japan and robots, and interviews did corroborate with this to a degree by pointing to robots in Japanese popular culture. However, interviews also demonstrated that the interest generated by these robots is not limited to Japan, and comes from across the world, though particularly from other East Asian countries. The third final category refers to the future capability of robots. Interviews suggested that while robots are already proving successful, the technology still needs developing and there are many things that robots still cannot do. Reduced down to these three main categories of response, it can be seen that explanations for robot use are rational, as opposed to appeals to Japanese culture, as in the news articles. Although news articles did mention the impact of an ageing population and consequent declining workforce as a factor for the adoption of robots—a rational and pragmatic solution—by and large claims were exaggerated. These findings show that robots are being used to solve problems, such as the declining workforce, but also to cut costs and reduce the need for training staff.

Moreover, the robot-using companies acknowledged that the robots could be improved, through the development of additional capabilities, recognising that part of robots' strength is their novelty appeal.

Evaluation

At the beginning of section two, statistics from the IFR were used to demonstrate that Japan is not the world leader in robots, either in production, nor in use (Figure 5.1, Figure 5.2, Figure 5.3). Rather, this is an outdated depiction, which while once true, has not been the case since 2010, when Japan was overtaken by South Korea, and has since been overtaken by Singapore and Germany (IFR World Robotics 2017). That is not to say, however, that Japan's robot market is insignificant as it still outranks most other countries, including the United Kingdom (IFR World Robotics 2017). Indeed, as the statistics show, Japan is responsible for the majority of entertainment robots and robots for elderly care (IFR World Robotics 2017), which broadly falls in line with the narrative of news articles about robots in Japan.

What the news articles neglect to acknowledge is the wider context in which Japan's robot use sits, in that robots are used across the world, particularly in the form of industrial robots in factories. Indeed, as Figure 5.15 below shows, robot sales have been on the rise globally (IFR Statistical Department 2015). The chart shows the number of industrial robots sold between 2000 and 2015, the period selected for news sampling for this study. For the first half of this period, robot shipments remained similar, with a peak of 120,000 shipped units in 2005; at this point, Japan was still world leader in industrial robots, and so at this time associations between Japan and robots were stronger, as global shipments were not so high. However, after the dip in 2009, robot shipments began to increase, and it is at this time industrial robots began to increase globally, displacing Japan from its top spot.

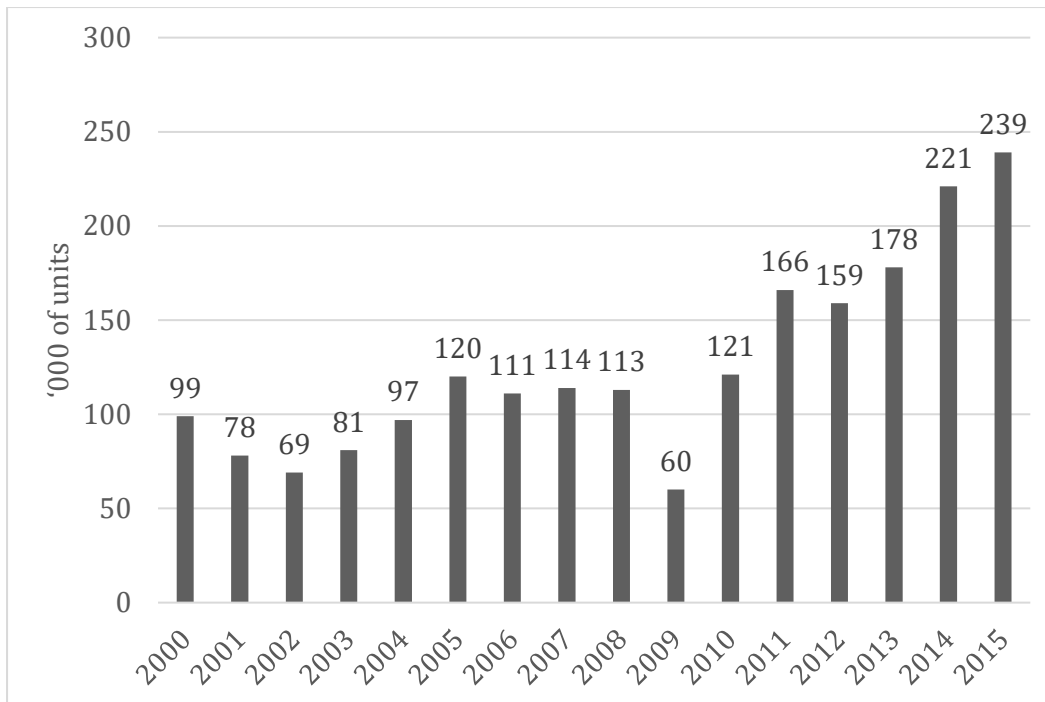


Figure 5.15 Worldwide Annual Supply of Industrial Robots 2000-2015 (IFR Statistical Department 2015)

Limited acknowledgement in news articles of Japan's no longer occupying the title of world-leader can be seen in articles about global trials of robots 'from Singapore to Salford' (BBC2013c) or the need for the US Defense Department's technologies agency DARPA to theme their annual robotics challenge around emergency-response, following the inability of Japanese robots to aid with the Fukushima disaster (BBC2013d). However, as was seen in the case of articles about Fukushima, this was expressed as surprise, because it countered the common depiction, but did not change it.

Despite the global increase in robot sales generally, Japan does remain a leader in terms of humanoid and anthropomorphic customer-facing robots, although as the fieldwork shows, this is an emerging technology and implementation is gradual, with limited features at this moment in time. Indeed, as in the cases of the Chihira robots (Toshiba Interview 2016), and the robot EMIEW-3 (Hitachi Interview 2016), usage is often restricted to trials, where certain features are tested in a controlled setting. This is not always mentioned in news articles, however, leading to exaggerated depictions of the country as already having robots widely used in customer-facing roles.

Reporting of high-tech Japan, specifically robots, represents the extreme end of the visual scale of perceived technology level, as introduced in the methodology (Chapter 3, Figure 3.1). The first example technology, fax machines, that, while Japan has been considered technologically-backward in its use of faxing, news articles' depictions of

this usage lacked a degree of context, resting on stereotypical depictions of an Orientalised Japan, which is stuck in a fixed past. Through interviews and observation, it was found that faxing was used in certain scenarios where email was inappropriate, and even then, it was not the most common communication method. This was reflected in a revised scale, situating Japan's actual fax use on the scale based on empirical fieldwork.

Similarly, this chapter has found that Japan's use of robots is not as ubiquitous as news articles often claim. Indeed, statistics show that Japan is no longer world leader in industrial robot use, which accounts for the majority of robot use (IFR World Robotics 2017). Interviews with robot manufacturers show that, while functionality is gradually increasing, for the present use is generally limited to trials of certain features (as seen in the observation of EMIEW-3). Similar to the fax example technology, the depiction of robots in use in Japan is exaggerated but not false; Japan does lead the way in entertainment robots and robots for elderly care (IFR World Robotics 2017). Moreover, interviews both with manufacturers and robot-using companies demonstrate that humanoid and other anthropomorphic robots are being used to varying extents in Japan, with Pepper being the most well-known and highly-diffused example, being used in a number of customer-facing roles. Taking these findings into account, Figure 5.16 adjusts the positioning of Japan on the scale to reflect robot usage as found during the fieldwork through observations and interview.

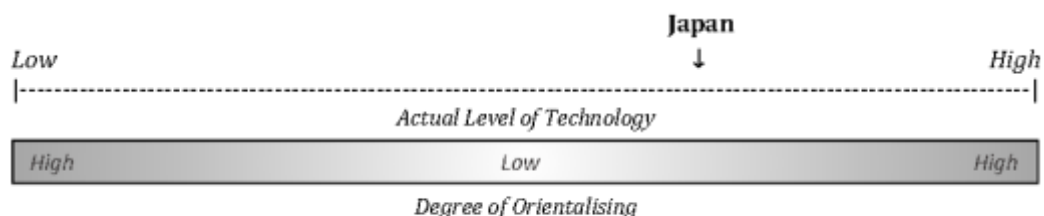


Figure 5.16 Adjusted Scale of Actual Robot Use

Unlike in the case of faxing, which is increasingly uncommon and reserved for certain situations, interviews with robot manufacturers and robot-using companies suggest that robot use is already comparatively high, particularly when compared to that of the UK, where robots have not been introduced in customer-facing roles to the best of this author's knowledge at the time of writing. Moreover, manufacturers and companies alike indicate their intention to expand the number of robots in use in the future, and manufacturers are confident in their ability to improve the capabilities of robots, with a target of 2020 for extended implementation (Hitachi Interview 2016,

Toshiba Interview 2016). This target has been endorsed by the Japanese government as part of its 'robot strategy' (METI 2016), with Prime Minister Shinzo Abe aiming for a 'robot revolution', coinciding with the 2020 Summer Olympics in Tokyo (Kemburi 2016, n.p.). As such, Japan has been positioned closer to the middle of the scale, which represents the 'norm', as understood by the British journalist and audience, established in the methodology chapter (Chapter 3), but slightly closer to the 'high' end of the spectrum to reflect the higher use as compared to the UK.

Conclusion

The CDA carried out in the first part of the chapter analysed articles about robots in Japan for their assumptions and underlying stereotyping and Orientalism. It was shown that Japan is considered to be obsessive about robots, and the language used suggested that the articles' audiences are presumed to have an existing association between Japan and robots. This use of robots is often contextualised through its difference to that in the UK, as shown by the use of language highlighting Japan's strangeness and its difference. This fits into the understanding of Orientalism established in the literature review (Chapter 2), which says that Orientalism positions the West as the norm. In particular, Japan's use of robots is often written about in the context of its ageing society, which is framed as a problem unique to Japan. The appeal to numerous assumptions and existing knowledge of Japan is typical of stereotypical thought and the frequent othering of the country typical of Orientalism, much the same as in the first case. In contrast to the first example technology, which considered articles where Japan was behind technologically, this example technology found Japan to be portrayed as technologically ahead. Rather than Orientalism in the original Saidian sense, it was found that the treatment of Japan had more in common with Techno-Orientalism, which considers Japan to be hyper-technified and dehumanised. It was found that news articles frequently rest on the assumption that Japan has long been home to robots, which is indicative of a Techno-Orientalist attitude towards Japan. Indeed, stereotypical depictions of Japan as an obsessive and weird high-tech country could be found throughout the sample.

The second part of the chapter examined the claims about the prevalence of robots in Japan through fieldwork and interviews with robot manufacturers and companies using robots. Interviews and observations demonstrated that Pepper robots are in wide circulation, and in the case of Nestlé at least, are proving successful. With other robots it is decidedly less clear. Robots such as EMIEW3 and those on show at

CEATEC demonstrate that Japanese robotics companies are actively developing technologies with the hope of having them being used by stations for directions or in shops for sales, but the robots are still in development. The robot hotel, Henn-na Hotel, was found to differ from its depiction in news articles. Although there was a degree of automation, there were not as many robots in use as claimed. However, according to the interview, the purpose of the hotel was different to that reported. Newspaper articles lacked the context of the hotel being a family hotel in a theme park, designed to be about delivering an entertaining experience and offering good value for money.

Use of robots is thus not uncommon, and manufacturers are confident about implementation in the near future, but newspapers have exaggerated the state of current robotics. The capabilities and degree of use of robots is at odds with many news reports, which raises the question: how many people writing about a robot have actually seen or interacted with it? Indeed, the role of the journalist is of great importance, and as such the next chapter will consider how journalists impact the public's understanding of Japan, how they affect the perpetuation of stereotypical depictions and Orientalist thought, and also what other sources are responsible for the propagation of knowledge about Japan.

Chapter 6: Contradictory Depictions and the Production of News

The two example technologies presented in the previous chapters have addressed the first of the three subsidiary questions devised to address the overarching research question and puzzle of this thesis: To what extent are contradictory depictions of technology in Japan in the British press rooted in stereotyping, and how can they coexist? By analysing specific depictions of technology in Japan, it was shown that to a large extent articles rely on stereotypical depictions and Orientalist notions of Japan in their discourse, thus addressing the first working question of the thesis. It is now possible to move onto the second subsidiary question:

- 2) Are contradictory stereotypical depictions products of different stereotypical knowledge?

In order to answer this question, it is necessary to bring the two analyses together and compare them, which will form the first half of this chapter. The second half of this chapter will address a complication that arose from example technology chapters: the third subsidiary question asked whether depictions could be supported by evidence. However, by carrying out observations and interviews relating to the actual use of the technologies, it was shown that the depictions in news articles did not match the data obtained during fieldwork. Based on these results, the original subsidiary question was inadequate for explaining these depictions, and thus necessitated an additional subsidiary question:

- 4) If these depictions are not supported by evidence, why do they continue to appear in articles?

This chapter is therefore split into two sections to consider each question in turn. The first section will explore the roles of stereotyping and Orientalising in the formation of contradictory depictions, and then consider whether these depictions are really contradictory at all. By building upon the article analysis chapters (Chapters 4 & 5), which have so far used CDA to demonstrate that stereotypical assumptions can be found in articles about technology in Japan, as well as fieldwork to demonstrate that these depictions differ from empirical findings, the findings of the cases will be used to show how stereotypical knowledge is used to construct contradictory depictions

of Japan. This will be achieved through a comparative synthesis of the example technologies: the findings of each technology chapter will be brought together to show that, despite the differences in the depictions, they are nevertheless derived from the same stereotypical knowledge, and support it, too.

Having established how contradictory depictions are constructed from stereotypical knowledge and Orientalism, the second half of the chapter will then examine how and why apparently contradictory stereotypical depictions of Japan continue to persist in the press, particularly in the presence of evidence to their contrary. Here, literature on stereotyping and cognitive processes will be used to propose explanations for this, such as the expertise of the journalists themselves, their own cognitive biases, and the demands of the newspaper to produce content that conforms to existing ideas about Japan. These explanations are then explored through interviews with journalists working in Japan, as well as a foreign editor for a British newspaper.

Section One: Comparative Synthesis

So far, the thesis has focussed on the cases as separate entities, from the analysis of articles to the carrying out of interviews and observation-based fieldwork, these cases were considered in isolation. However, as the introductory chapter (Chapter 1) first explained, these articles do not exist in isolation, but side by side, and as the article analysis chapters showed, are both subject to stereotyping and Orientalism. In order to understand the puzzle of contradictory depictions of Japan, and of countries in general, it is necessary to bring these two apparently opposing depictions together.

This section will therefore begin by drawing the analyses together in order to compare the results, showing how stereotyping and Orientalism were present in both cases, but activated in different ways, leading to different, and thus contradictory depictions. The CDA analysis was based on three analytical categories: context, structures, and rhetoric & meaning. This analytical framework was used to identify and draw out stereotypical depictions and Orientalist discourses within the texts, in written form as well as in unwritten assumptions. Table 6.1 below summarises the findings of both cases, as split across these three categories:

Component of Analysis	Findings	Low-Tech Japan	High-Tech Japan
Context	Long soft news articles/features	✓	✓
	Low discursive power for Japanese voices	✓	
	Discursive power for Japanese voices		✓
	Changing narrative	✓	
	Persistent narrative		✓
Structures	Reduction of whole country to 'Japan'	✓	✓
	Emphasis on language of difference	✓	
	Japan as a spectacle	✓	
	Anthropomorphism of robots		✓
	Japan as obsessive	✓	✓
Rhetoric & Meaning	Us vs them dichotomy	✓	✓
	Japan as traditional	✓	
	Japan as unchanging	✓	
	Japan as futuristic		✓
	Western rejection vs Japanese acceptance	✓	✓
	Japan as obsessed	✓	✓
	Japan as unknowable	✓	
	Japan as fascinating	✓	
	Japan as weird	✓	✓
	Japan as unique	✓	
	Japan as different	✓	✓
	Importance of culture	✓	✓

Table 6.1 Comparison of Findings in Both Cases

As the table above shows, there is some commonality between the two cases, in spite of their differing depictions of Japan. The same stereotypical knowledge is activated in both stereotypical depictions, but is manifest in different ways. As the first example technology chapter showed, faxing in Japan, this thesis' example of a depiction of low-tech Japan, was explained by certain stereotypical knowledge about the country: faxing was attributed to Japanese culture, it was attributed to Japanese tradition, and it was attributed to the country's 'unique' status. In the second case, robots in Japan, the purported high diffusion and acceptance of robots was also attributed to these same elements of stereotypical knowledge about Japan: its culture, its tradition, and Japan's uniqueness. Since these two highly different cases share these similarities, it is worth comparing them side by side in order to understand how these stereotypical

depictions are constructed, especially within the context of the puzzle at the heart of this research: how do two contradictory depictions of Japan's relationship with technology coexist?

In rooting Japan's relationship with technology—in both the case of low-tech Japan and high-tech Japan—in culture, both depictions are also examples of Orientalism at play. In the literature review, two main forms of Orientalism were found to be applied to Japan: Orientalism, as first described by Edward Said, and Techno-Orientalism. The case of low-tech Japan is an example of Saidian Orientalism since it is a depiction of Japan that is defined by the 'dogmas' of Orientalism: the 'absolute and systematic difference between the West [...] and the Orient' (Said 2000b, 104), that 'abstractions' are preferred over 'direct evidence' (2000b, 104), and that the Orient is 'eternal' (2000b, pp. 104f). According to this kind of Orientalism, the East is seen as inferior to the developed West, locked into a fixed past. This was observed in the CDA of articles about low-tech Japan, where Japan was described as if it were a stubborn infant, refusing to catch up with the West. Indeed, articles attribute this to Japanese tradition, linking faxing to a culture of letter-writing and calligraphy (*BBC News* 2012; *The Independent* 2013). Another way in which culture is invoked as explanation is in reference to Japanese corporate structure, and the respect that is paid towards senior staff (*The Independent* 2013; *BBC News* 2015). According to this line of argument, Japanese culture hinders technological change on two fronts: first, within Japanese corporate culture, decision-making is a lengthy process, requiring lengthy discussion and universal agreement, which takes time and thus slows the implementation of change (*BBC News* 2000); second, seniority of position correlates to age, which means that older, less technologically adept persons are in charge, again slowing technological change.

The case of high-tech Japan, meanwhile, appeals to a Techno-Orientalist understanding of Japan, which like Saidian Orientalism is bound up in 'systematic knowledge' (Said 1978, 39) as it is based on 'an array of stereotypes and deformations about Japan' (Lozano-Méndez 2010, 183). As the literature review explained, Techno-Orientalism does not replace traditional Orientalism, but can be seen as a different 'spin' on it (2010, 184). Much like Saidian Orientalism, Japan is positioned as the Other, distinct from the West, and inferior to it too. In spite of Techno-Orientalism characterising Japan as technologically advanced, it is described in negative ways: either Japan is *too* technified, at the cost to their humanity, or the technologies with which they are obsessed are derided (2010, 189).

Orientalism focusses on the distinction between the East and the West, both in the original Saidian form of Orientalism, and in Techno-Orientalism. Both cases featured numerous instances of this difference being highlighted, which the analysis drew out through the incorporation of van Dijk's model of discourse as the relationship between 'us' and 'them' (van Dijk 1998) into the analytical framework. Examples of this Othering can be found below:

Low-Tech Japan:

no amount of further reassurance will change their minds (*BBC News* 2005)

this is a country that uses people to do the work of traffic lights and where big-name companies running 10-year-old software is the norm (*BBC News* 2015)

while much of the developed world has decamped online, millions of Japanese still prefer to send documents by fax (*The Independent* (online) 2013)

High-Tech Japan:

Will machines for the aged herald the age of machines?: The Japanese vision of robots working alongside humans may be a cultural step too far for westerners (G2006a)

Would you take out a loan from a ROBOT? Japanese bank hires humanoids that can read emotions to sell you products (MailOnline2015b)

We may both be tea-sipping, island-dwelling monarchies, but there are one or two differences between Britain and Japan. Fish, for example. They're potty about seafood, while we are bizarrely indifferent to the riches that swim around us (I2001)

As suggested by the table, in both cases articles refer to the West's rejection of, or even bemusement at, something that is done in Japan. In the case of low-tech Japan, this was the use of fax machines, which the West has rejected. For high-tech Japan, the Japanese have embraced robots, but the West is weary of them, as shown by articles warning of the dangers of robots and their impact on jobs, etc. In keeping with Orientalist attitudes, the attitudes of the West are shown to be the attitudes of the superior civilisation: the West has moved beyond fax machines, while Japan lags behind; and the West is taking a more cautious approach to the implementation of robots, whereas Japan is shown to value robots more than people in its willingness to create robots to do jobs. Evident in these examples, too, is the reduction of Japan to a single, collective unit, which fails to acknowledge that Japan is a country of 127 million people (World Bank 2016), all of whom have different beliefs, experiences and goals. Further examples can be seen below:

Low-Tech Japan:

the locals had a uniquely Japanese answer to the problem (*The Guardian* (online) 2007a)

Japan is obsessed with hard copies (*BBC News* 2012)

High-Tech Japan:

Japan has no problems with machines taking over the living rooms (G2001a)

Japan has been obsessed with the idea of giant robots (BBC2009a)

But in Japan they take things much more seriously (M2002)

In these examples, the Japanese are shown to be of one opinion, universally accepting fax machines and robots. Such acceptance is attributed in both case studies to Japanese culture, an explanation common in Orientalist discourse, which ascribes an immutability and static quality to Japanese tradition and culture, locking the country in a fixed point in time. In the case of low-tech Japan, examples focus especially on the image of traditional Japan, whilst the case of high-tech Japan appeals to the nation's long-term love for robots, though as the example below shows, traditional Japan can be used to explain even robots, evoking imagery of geisha:

Low-Tech Japan:

there's another side: the ancient spiritual Japan of temples, landscape gardens and geisha (BBC News 2005)

the culture of handwriting is firmly rooted here (BBC News 2012)

High-Tech Japan:

Japan is the spiritual home of the strange, and often pointless, gadget (Mail2004)

That's right, the country that gave us the creepy cyborg geisha, will now hand the financial frontline over to a non-human (MO2015a)

The two cases also share the commonality that Japan is presented as 'weird'. Across the samples, Japan is regularly characterised not only in its difference, but in how it is different to the point of being weird. A number of different words are used throughout the sample—weird, strange, bizarre, unfathomable, quirky, inventive—and these terms are often used in contexts suggesting that fax machines and robots and yet more examples confirming established knowledge. The depiction of Japan as weird is not limited to discussion of technology in the country, but is used across news topics to refer to the country. Indeed, according to a LexisNexis database search of the headlines and lead paragraphs of the UK main national newspapers in print and online over the fifteen-year period, 2000 to 2015, 'bizarre' has been mentioned alongside 'Japan' in 378 articles, 'crazy' in 242, 'strange' in 378, 'unique' in 326,

'unusual' in 345, and 'weird' in 194 articles. This is not new, and was one of the criticisms aimed at journalists in *Japan: Made in U.S.A* (Zipangu 1998).

Not only is Japan depicted as 'weird' in both cases generally, but one particular instantiation of this weirdness is Japan's obsessive character. In the examples below, Japan's use of technology is explained by obsession:

Low-Tech Japan:

no amount of further reassurance will change their minds (BBC News 2005)

Japan is obsessed with hard copies (BBC News 2012)

High-Tech Japan:

Japan has been obsessed with the idea of giant robots (BBC2009a)

The unstoppable onslaught of the robots is continuing in Japan, where they will soon be used to... sell coffee machines! (MO2014b)

In the case of low-tech Japan, while Japan does have the same modern technologies that can be found in the UK and the West, it refuses to abandon the fax because it is 'obsessed'. The top example, while not about fax specifically, highlights a stubbornness or fixation the Japanese are perceived to possess. This can also be seen in the case of high-tech Japan, where Japan's obsession with robots is considered 'unstoppable' (implying that it should be stopped), and this obsessive nature is emphasised by describing it as a 'love affair', the same language used to describe Japan's obsession with fax. Inherent Orientalist attitudes towards Japan across both cases can thus be summarised as presenting Japan as:

- Unique, in how unlike most other developed countries, faxing still takes place; and also unique in the adoption and acceptance of robots;
- Unknowable, in how Japan surprises the West in its use of faxing; and also in the sense that it is a glimpse of the future and the surroundings are bizarre to the Western observer;
- Unchanging in that Japan has resisted abandoning the fax machine and it is rooted in culture and tradition; as well as unchanging in that there is a perception that robots have long been accepted in Japan, owing to historical and cultural factors.

As Table 6.1 shows, the two cases were not always identical in their stereotyping, and the main divergences can be found in the differentiation inherent in the topics themselves: in the case of low-tech Japan, Japan is traditional and unchanging, which

is why it holds onto old technologies, whereas in the case of high-tech Japan, Japan is futuristic, thus making the use of robots unsurprising to the audience. Interestingly, while the first example technology showed Japan to be unchanging, the narrative surrounding fax machines did change, as it went from being a technology used commonly across the world to one perceived only to be used in Japan. Clearly then Japan was not always backwards technologically, even if it was being portrayed as traditional. Indeed, there are only 18 articles for the first example technology, compared to 153 for the second, but this relates to McGarty's conception of the stereotypical depiction as 'immediate' and 'fleeting' (2002, 19). While individual depictions might appear and disappear, they are nonetheless informed by the stereotype, the set of mental relations which is harder to change. It is through the repetition of these depictions that they become incorporated (2002, pp. 19f).

In the case of the second example technology, across the fifteen-year sample the depiction of Japan as a robot nation is consistent and does not change, indicating that it has been incorporated into the 'mental structures' of the stereotype (McGarty 2002, pp. 19f). Either Japan persistently stays ahead of other countries in its technological development, or the stereotypical depiction of Japan as futuristic is so extreme that levels of technology have never caught up with the depiction.

If the reporting of low-tech Japan and robot-using Japan are taken as examples of extremes, then it stands to reason that between these extremes a large proportion of Japan is going unreported. Indeed, when such news articles talk about 'weird' aspects of Japan, by necessity there must be a 'normal' Japan with which this can be compared. However, stereotyping and Orientalising, as processes of generalisation and exaggeration can generate only these extreme depictions, and with no depictions of a middle-ground, the analysis of these cases show that stereotyping and Orientalism can lead to contradictory depictions.

Moreover, these contradictory depictions can arise from activation of the same stereotypical knowledge, even if they result in different stereotypical depictions. As this comparative synthesis has shown, in both cases Japan is described in terms of being unique, unknowable and unchanging, depictions which correspond to notions of Orientalism, as established in the literature review (Chapter 2). While the stereotypical knowledge that informs these depictions is the same, the resulting depictions are contradictory because they are refracted through different Orientalist lenses: in the case of low-tech Japan, stereotypical knowledge is combined with Saidian Orientalism, leading to depictions of a technologically backwards Japan,

whilst in the case of high-tech Japan, this same stereotypical knowledge is seen through the lens of Techno-Orientalism, producing depictions which emphasise a hyper-technified Japan. While different, and contradictory, what unites these depictions is that Japan is defined by its difference, by its opposition to the West, which is situated as 'normal'.

In the methodology chapter (Chapter 3), a visual scale was employed (Figure 3.1) in order to illustrate the puzzle of contradictory depictions. In each of the example technology chapters, this scale was reassessed, and Japan's position on the scale was adjusted to reflect the use of technology as found in interviews and through observation. In both cases, it was found that the technologies were being used less than was depicted in news articles and so Japan's position was moved towards the centre of the scale. In the final version of the scale below (Figure 6.1), rather than having two distinct and contradictory positions along the scale, Japan's technological usage occupies the entire space in between. In its final position, Japan is shown as neither overtly low-tech, nor high-tech. Just as the level of technology can be presented as a spectrum, from low to high, the specific usage of technology in Japan is also a spectrum, dependent on specific circumstances and the demands or requirements of these circumstances. Flanking either side of Japan's position on the scale are the labels 'Reported Japan', reflecting the exaggerated depictions found as a consequence of stereotyping and Orientalising. The 'real' Japan that has been presented on this scale is therefore that which is based on the empirical evidence presented in this thesis.

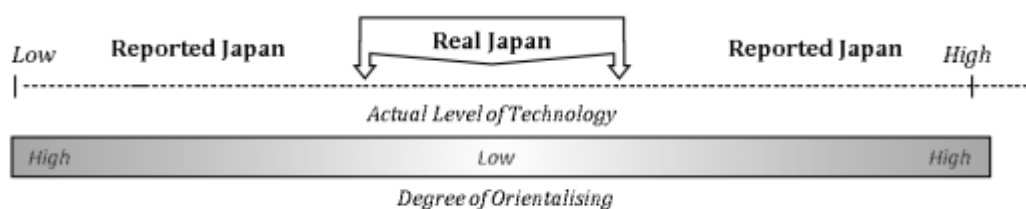


Figure 6.1 Final Scale of Actual Technology Use, Showing Technology Usage to be Across a Spectrum

Of course, what counts for normal is dependent on the individual perception of the journalist and their experiences. As Corson argues, one's worldview is 'the lived experience of a culture in the values that members of the culture hold dear' (Corson 1995, 187). From the Orientalist perspective, the East must always be the Other, and the differences between the East and the West are therefore emphasised (Said 1978, pp. 2-4). As such, Japan may never be the norm from the British perspective, and must

exist outside of this at fixed points, either in the past under Saidian Orientalism, or in the future, under Techno-Orientalism. As the individual example technology chapters showed, faxes are used at specific times for specific purposes, alongside more contemporary technologies such as email. Similarly, robots are commonly used in manufacturing, and are increasingly being used in customer-facing situations, too, but not to the extent reported. Technology use depends on context, some situations requiring more advanced technologies than others, and as such there is no fixed level of technology that is used. Older technologies may be adequate for certain purposes, but more advanced technologies may also be used.

So far, this chapter has shown that stereotyping and Orientalising contribute to the creation of contradictory depictions of Japan and its relationship with technology, answering the second subsidiary question, but the third subsidiary question has not been fully addressed. The third subsidiary question asked whether these depictions could be evidenced and the example technology chapters (Chapters 4 and 5) found that, although there was some evidence supporting claims, many of the depictions were exaggerated and rooted in stereotyping and Orientalism. However, given that news reporting is ostensibly the reporting of real life events and facts, how do these depictions persist without adequate evidence? Moreover, while it has been shown in this chapter that these depictions are not truly contradictory, thus explaining how they can coexist, this naturally leads to the question of why they coexist, in the face of evidence to the contrary. This necessitated the introduction of a fourth subsidiary question to address this, and will be considered in the section below.

Section Two: Journalistic and Editorial Practice

So far, this chapter has shown that the depictions of low-tech Japan and high-tech Japan are not contradictory, but it must now be asked why these depictions coexist, particularly if there is limited evidence to support them. In order to answer this additional subsidiary question, it is necessary to turn to the journalists themselves. For decades the state of foreign correspondents across the world has been an object of concern for researchers. Studies have traced the coverage of foreign news through the 60s and 70s (Livingston & Van Belle 2005), through the 80s (Mowlana 1985), and through the 90s to the present (Aalberg 2013; Jones et al. 2013; Segev 2017). While the majority of studies available are in the English language, there is a consensus and evidence to suggest that this is an issue for foreign coverage globally. According to

Segev (2017, 3), who analysed world news in sixteen countries, 'economically leading' countries tend to dominate news coverage, and often highly reported countries tend to be those who had historical dominance (such as Britain) as well as contemporary dominance (the US). For example, Segev's study found that Asian foreign news tended to be more heavily weighted towards other Asian countries, however the United States also received a lot of attention, arguably as a result of its political and economic importance to the region (2017, 14).

Segev's main argument is that 'unbalanced world coverage not only reflects a certain world order but also reinforces it' (2017, 2). Other studies have shown that representation is indeed unbalanced (Kim & Barnett 1996; Mowlana 1985; Otto & Meyer 2012), and, moreover, is in decline. Various research has shown that major US and British news media have seen a decline in the number of dedicated foreign correspondents in employment (Carroll 2007; Moore 2010; Otto & Meyer 2012). In terms of Britain specifically, according to Moore (2010), between 1979 and 2009 international news stories dropped by 40%, dropping from being 20% of the newspaper to only 11% (2010, 5). This comes in spite of the fact that newspapers have in fact grown in size (2010, 10), but international news stories have not grown with it. A consequence of fewer international stories is that there are fewer dedicated foreign correspondents for media organisations (2010, 25), and many news sources are relying on wires and obtaining additional information from the Internet, including foreign news websites, YouTube and social media (2010, pp. 45f). While Moore acknowledges that the Internet and social media have given people the ability to find news on things that specifically interest them (2010, 50), as well as has allowed for an increase in citizen journalism, since many people have mobile phones (2010, pp. 45-47), he highlights a number of problems with this new reliance on information obtained this way.

Firstly, if journalists are not based in the country where the event is happening, then they can only play catch-up, reacting only when information reaches them, rather than being on the scene as it happens or finding it for themselves (2010, 49). Secondly, Moore describes the new reporting structure of international news as like an 'inverted pyramid', in the sense that there is far more news being generated, but fewer journalists supporting it (2010, 48). Moore argues that this structure is unstable, because if newspapers and news websites use an agency source and it is later found out that the agency made a mistake, then that mistake has been exponentially multiplied, as smaller news sources quote the larger newspapers

(2010, 48). This leads to the third issue, that if journalists are not on the ground, then there is an issue of knowledge: they cannot interview people involved, they cannot directly record what is happening, and by not witnessing the event first-hand, they cannot adequately convey it to the audience (2010, 47). Indeed, as Table 6.2 below shows, of the nine British news sources examined for this study, only four have Japan correspondents, although no information could be found whether this was a full-time position, or if the journalist works as a stringer (a journalist retained on a part-time basis to cover events when required).

Web Rank	Print Rank	Publication	Japan Correspondent
1	N/A	<i>BBC News</i>	Yes
3	1	<i>Daily Mail</i>	No
4	4	<i>The Guardian</i>	Yes
5	5	<i>The Telegraph</i>	Yes
10	3	<i>The Daily Mirror</i>	No
12	6	<i>The Independent</i>	Yes
13	N/A	<i>IB Times</i>	No
17	2	<i>The Metro</i>	No
18	N/A	<i>Sky News</i>	No

Table 6.2 Japan-Based Foreign Correspondents for British News Publications, Based on Available Information

As the literature review (Chapter 2) found, there has been a tendency to blame journalists for inaccurate depictions of the Other in general (Fürsich 2010), as well as of Japan specifically (Kondo 2005; Zipangu 2008). Lasorsa and Dai (2007) and Donsbach (2004) have proposed a number of explanations for journalists' reliance upon stereotyping. Both studies argue that stereotyping carried out by journalists can be explained by examining the process from the following perspectives: the sociological perspective (Lasorsa & Dai 2007, 281), the cultural perspective (Lasorsa & Dai 2007, 281; Donsbach 2004, pp. 150f) and a psychological perspective (Lasorsa & Dai 2007, 281; Donsbach 2004, pp. 150f).

While Lasorsa and Dai's study is problematic, particularly in its attribution of blame to journalists and its assumptions about their motivation, their research did find that even those articles in their sample which could be described as 'accurate' were still not entirely devoid of stereotyping (2007, 292). This is indicative of the general universality of stereotyping, that even when journalists actively seek to give a fair and accurate representation of a story, based on considerable research, stereotypical

knowledge will still be activated, albeit to a lesser extent. Moreover, the study's literature review provides a number of variables to consider, which could affect a journalist's writing, namely: how the journalist approaches the story (the sociological perspective), how the journalist approaches writing for an audience unfamiliar with Japan (the cultural perspective), and the job demands affecting the journalist (the psychological perspective). By bringing these different perspectives together, it is possible to construct two possible explanations for what allows seemingly contradictory depictions to be shown in the media:

- 1) Journalistic factors: reporters do not have the necessary expertise to write about Japan without appealing to pre-existing perceptions (Donsbach's cognitive-psychological perspective, Lasorsa and Dai's cultural perspective)
- 2) Editorial and systemic factors: editorial demands and systemic pressures of the job result in typification (Donsbach's sociopsychological perspective, Lasorsa and Dai's psychological perspective)

Interviews with journalists were arranged through the Foreign Correspondents Club of Japan (FCCJ) and the Foreign Press in Japan (FPIJ), both based in Tokyo. Of the journalists contacted, not all responded to initial or subsequent emails. Others were unavailable to find a mutually acceptable time for interview, and one journalist sustained an injury just before the interview. In spite of these setbacks, three journalists living and working in Japan were interviewed. These journalists represent some of the different kinds of journalist working on Japan-related stories today. Firstly, Journalist 1 works as a freelancer for a number of publications as well as a number of websites, such as technology blogs (Journalist 1 Interview 2016). Journalist 2 is the former Japan foreign correspondent for one of the chosen publications and now writes for other publications on a freelance basis (Journalist 2 Interview 2016). Finally, Journalist 3 was the only dedicated foreign correspondent interviewed, currently working for a major British broadsheet not in the sample, but was formerly Japan correspondent for one of the sample publications. While Journalist 3 is a dedicated foreign correspondent, he covers not only Japan, but is Asia Editor for the publication, covering multiple countries (Journalist 3 Interview 2016).

Table 6.3, below, breaks down the interviews into two lines of questioning, with example questions from each category (the full question list can be found in Appendix 4). The middle column of the table presents the responses given to the lines of questioning, followed by the journalist(s) who gave the response in parentheses. Interview responses have been grouped into common categories in the third column,

following the open coding method (Berg 2001) introduced in the methodology chapter (Chapter 3). The interview questions were intended to address the two explanations above, first considering the journalists themselves and their own knowledge of Japan, and then secondly, the production of these articles, namely the editorial and systemic factors involved.

Line of Questioning	Response	Coding
Journalists' knowledge of and connection to Japan <ul style="list-style-type: none"> • How long have you been based in Japan? • Have you always been interested in Japan? • What is your level of Japanese ability? • Do you use an interpreter? 	Journalist has lived in Japan a long time (Journalist 1, Journalist 2) Journalist speaks Japanese (Journalist 1, Journalist 2) While a Japanese speaker, the journalist takes an interpreter (Journalist 3) Other foreign correspondents are being moved away (Journalist 1) Lots of journalists are writing about Japan from abroad with little knowledge of Japan (Journalist 1) Publications moving to using freelancers (Journalist 2)	Long-Term Residence Japanese-Speaking Fewer Japan correspondents Fewer Japan Experts
Editorial and systemic factors <ul style="list-style-type: none"> • How do you choose what to write about? • How long do you have to produce an article? • Is there a tendency in English-language writing to present Japan as weird? • What role does the audience play in the production of articles? • What role does the editor play in the production of articles? 	Robots are prime material for hype (Journalist 1) Hype stories are easy money (Journalist 1) Publications demand exciting stories (Journalist 1) Topics are requested by editors (Journalist 1, Journalist 2) Journalists write these kinds of articles because they need money (Journalist 1, Journalist 2) Editor writes headlines (Journalist 2) Too many short articles, not enough depth (Journalist 2) Journalist is free to choose topics (Journalist 3) Colour stories are popular (Journalist 2) Weird/strange Japan stories are often requested (Journalist 2) Editors request topics that have 'perennial' interest (Journalist 2) The average reader is not particularly interested in Japan (Journalist 2)	Editorial Control Hype Money Lack of Depth Weird Japan Perennial Topics of Interest Lack of Interest in Japan

Table 6.3 Coding of Journalists' Responses

All three of the journalists have lived in Japan for an extensive period of time: Journalist 1 has spent twelve years in Japan (Journalist 1 Interview 2016) and Journalist 2 went to university in Japan as well as did a homestay. The journalists also all spoke Japanese, although unlike the others Journalist 3 often used a Japanese assistant/interpreter when they were interviewing in Japanese (Journalist 3 Interview 2016). As well as having the experience of living or being educated in Japan, Journalist 1 has written a book on robots in Japan (Journalist 1 Interview 2016) and Journalist 2 is in the process of writing a book on journalism in Japan (Journalist 2 Interview 2016).

Interviews with journalists confirmed literature about the reduction of foreign correspondents for newspapers, providing additional information about the situation for Japan specifically. These interviews also explained how this has impacted reporting on Japan and provides some clues into why Japan continues to be stereotyped. If there is a low level of interest in Japan, then newspapers will be unlikely to have a dedicated correspondent in Japan, but the consequences for this is that the news will be written from a foreign news desk in the UK. This is problematic as journalists writing from the UK are unable to directly experience events or carry out in-person interviews, and are thus reliant on received information, be it existing knowledge in the form of stereotypical knowledge, or material that can be gained from newswires and the Internet. Moreover, if there is a low level of interest in Japan, these writers will be less motivated to carry out thorough research for their articles, and may instead appeal to existing stereotypical knowledge for explanations (Lasorsa & Dai 2007). Not only this, but interviews with journalists revealed that even if the journalists are based in Japan, there is still potential for the propagation of stereotypical depictions about Japan due to the demands of the editors, who want stories that will be popular with readers.

In the case of Journalist 1 and Journalist 2, they are often given specific topics to write about from their respective editors (Journalist 1 Interview 2016; Journalist 2 Interview 2016). Journalist 1 said these are often 'hype' stories, for which robots can be seen as prime material (Journalist 1 Interview 2016). They said that stories about robots in Japan are an easy story for the journalist and are like 'holding a piece of meat up in front of a human lion' (Journalist 1 Interview 2016). That is not to say that the hype is always inaccurate, as Journalist 1 suggested that the robot Pepper is an example of a robot that has lived up to the hype found in reporting (Journalist 1 Interview 2016). Journalist 2, however, found Pepper to be 'completely

underwhelming', but had been asked to write an article on the robot (Journalist 2 Interview 2016). Both Journalist 1 and Journalist 2 said that stories that hype up certain topics are very common, and Journalist 2 said that it is hard to write an article about robots and not play them up (Journalist 2 Interview 2016). One of the main reasons for this appears to be editorial control, as editors have an image of Japan they want to be presented (Journalist 1 Interview 2016; Journalist 2 Interview 2016). Indeed, editors will often write the headline of the article, which explains why sometimes there is a slight misalignment between title and content (Journalist 2 Interview 2016). Moreover, as these stories are popular with the readership or audience (whose role will be discussed more fully below), they are a guaranteed source of income (Journalist 1 Interview 2016), and since many journalists are now employed on a freelance basis, they need to write many articles like this, or take additional work on the side, such as Journalist 2 who lectures at a university and works for a Japanese broadcaster (Journalist 2 Interview 2016). Unlike the other interviewees, however, Journalist 3 is under no obligation to write articles about particular topics or write soft news stories (Journalist 3 Interview 2016). They are, however, responsible for Asia as a whole at their publication so do not write exclusively on Japan (Journalist 3 Interview 2016). Another issue raised in the interviews is that many of these articles are simply too short to give any real depth (Journalist 2 Interview 2016). As such, readers are not able to gain a good knowledge of Japan as they are not provided with context (Journalist 2 Interview 2016).

Journalist 1 (2016) and Journalist 2 (2016) both agree that the audience in part drives the kinds of articles that are written about Japan. Journalist 1 said that publications often ask for things to be 'jazzed up' for non-specialists as otherwise the article might be too matter-of-fact (Journalist 1 Interview 2016), and Journalist 2 said that the average reader is not even particularly interested in Japan (Journalist 2 Interview 2016). The lack of specific interest in Japan, coupled with the need to make articles interesting to read goes a long way in explaining the large volumes of short, depthless articles about Japan which present only the 'perennial' topics (Journalist 2 Interview 2016). Contrary to Journalist 2's claim that the British are not particularly interested in Japan, Journalist 3 said that the British public has a good idea of Japan (Journalist 3 Interview 2016). This may, however, be explained by the differences between the publications for which they have worked. As was explained in the methodology chapter (Chapter 3), broadsheet newspapers tend to focus on political news, and therefore have a more sophisticated readership, compared to tabloids

which focus on gossip (Baker 2013, 315). Similarly, Journalist 1 also wrote for technology blogs, where the audience would be interested in technology, but not necessarily Japan (Journalist 1 Interview 2016).

In order to provide a rounded analysis of the impact of the editor on the production of stereotypical depictions in news articles, as is suggested in the second explanation for the continued perpetuation of contradictory depictions, it was also necessary to interview a foreign news editor, thus providing context as well as a point of comparison with journalist interviews. The foreign editor interviewed was from a British broadsheet newspaper, one of the top ten ranking publications for both print and web (Press Gazette 2015; SimilarWeb 2016). Questions were asked pertaining not only to editorial and systemic factors, but also to journalistic factors, as the editor is in a position to provide information about the staff working under them, whereas journalists can only comment on their own experiences. Table 6.4 below details the general line of questioning asked during the interview, separated by the explanation covered, the responses to these questions can be found in the middle column, whilst the right-hand column has categorised these answers through open coding.

Line of Questioning	Response	Coding
<p>Journalists' and editors' expertise</p> <ul style="list-style-type: none"> • Where are articles written? • What additional sources are used? • Editor's knowledge of countries 	<p>Three correspondents are based in London, but all other coverage comes from abroad; Newswires and other news sites (UK and overseas) are used; Research papers, news briefings and embargoed stories are also used; When unsure about something, asks correspondent or does research</p>	<p>Foreign Correspondents Range of Sources Editor not a Specialist</p>
<p>Editorial and systemic factors</p> <ul style="list-style-type: none"> • How is it decided which countries get written about? • What pressures do editors face? • How important is the audience in deciding what gets written? 	<p>Some countries and topics are more relevant to a UK audience and get more coverage; Japan ranks high because it is popular with British tourists and is at the heart of the biggest geopolitical stories at the moment; Reduced staff and budgets pose a challenge for trying to cover the world; Pressure comes from the deputy editor and editor of the paper; Pressure comes from managing a large staff and freelancers scattered around the world; Newspapers respond to changes in online and mobile readership; An article exists to be read by an audience; Stories are commissioned because they matter, but stories are also commissioned to entertain readers</p>	<p>Japan Currently Ranks High Reduced Staff & Budgets Pressure from More Senior Editors Pressure Managing Global Team Articles Are Written to be Read</p>

Table 6.4 Coding of Editor's Responses

The interview with the foreign editor confirmed several aspects of the proposed explanation of editorial and systemic factors playing a role, explaining that there are a number of challenges to their job specifically, as well as to the wider reporting of foreign news in the British press. The main challenge, according to the editor, is 'trying to cover the world with reduced staff and budgets' (Editor Interview 2018), echoing the concerns raised in studies of the state of the foreign correspondent. A consequence of these reductions is that 'fewer countries are covered in depth', and the editor said that countries and topics are given precedence based on their relevance to a UK audience (Editor Interview 2018). In contrast to Journalist 2's opinion that the British are not particularly interested in Japan (Journalist 2 Interview 2016), the editor said that Japan ranked 'fairly high' in terms of importance,

attributing this to the popularity of Japan among British tourists, cultural links, and geopolitical events (Editor Interview 2018). This last point is particularly salient, and can be seen in the high number of articles written about Japan after the Fukushima disaster in 2011, which is even evident in the technology articles sampled for this thesis. The editor's interview was carried out at the beginning of 2018, and the editor's ranking of Japan as highly important is likely to have been influenced by the nuclear missile tests carried out by North Korea, which saw missiles fired over Japan (White 2017).

Other pressures faced by the foreign editor include pressure from more senior editors, such as the deputy editor and editor of the newspaper to 'deliver strong content every day on deadline' (Editor Interview 2018). Time is thus a concern to both journalists and editors alike. Moreover, the editor is under pressure to pick not only the most important stories of the day, which they define as 'stories that have a good chance of getting in print or displayed on the opening page of our website' (Editor Interview 2018), as well as stories that the audience will respond well to, because an 'article exists to be read by an audience' (Editor Interview 2018). Articles must therefore be engaging, and while stories 'that matter' are of most importance, stories that make the reader laugh or educate the reader about something new are also needed to drive the audience to the website or generate sales (Editor Interview 2018).

Of the two possible explanations for what allows seemingly contradictory depictions to be shown in the media, the first explanation can only apply to those journalists who are not working in Japan, as interviews with foreign journalists working in Japan showed that they generally have a good knowledge of the Japanese language, often including formal Japanese training, as well as knowledge of Japanese culture through living in Japan. Nevertheless, exaggeration does occur, as shown by the CDA, and is even acknowledged by the journalists themselves, lending credence to this explanation. Moreover, while the journalists interviewed had long-term residence in Japan, they said that there were fewer and fewer Japan correspondents, and that much journalism about Japan done for British publications is written from desks in the UK. The second explanation presented another possibility for why articles contain exaggeration, even if written by journalists based not only in Japan but with Japanese language abilities. Editors do indeed influence the way in which Japan is reported, from the topics which are written about to the way in which articles are written.

While editorial demands were one factor expressed in the interviews, they were not the only factor, as the perceived audience also plays a role in influencing what kind of articles are written, although it may be the editor who pays attention to what is popular and then demands more of these kinds of articles. Interviewed journalists also felt the pressure to comply with demands because of financial reasons, since comparatively few foreign correspondents are dedicated correspondents, but rather are freelance and therefore not salaried. Even these demands, however, were shown not to be the main factor for the exaggeration found in news articles. Rather, it was the journalists' own perceptions and experiences informing the articles. Indeed, the interview with the foreign editor found that while journalists are sometimes asked to follow leads, they are equally encouraged to find their own stories (Editor Interview 2018). Aspects of the second explanation were supported by the interview with the foreign editor, who confirmed that there were many pressures affecting both journalists and editors alike, including reduced budgets and staffing, as well as the time constraints of journalism. The editor, however, said that the pressures of reduced numbers of staff and decreased budgets were challenges that were part of what made the job as editor enjoyable, as it meant coming up with solutions and working against the odds to maintain good journalism (Editor Interview 2018). On the whole, of the two possible explanations for the propagation of contradictory depictions in the news media, which were (i) journalistic factors, and (ii) editorial and systemic factors, it was found that a combination of both explanations accounted for the persistence of contradictory depictions of Japan in the British press.

Conclusion

This chapter built upon the findings of the two example technology chapters in order to address the two remaining subsidiary questions:

- 2) Are contradictory stereotypical depictions products of different stereotypical knowledge?
- 4) If these depictions are not supported by evidence, why do they continue to appear in articles?

While the individual example technology chapters demonstrated that articles across both cases relied heavily upon stereotyping and Orientalism, the puzzle of contradictory depictions remained, and was even compounded by the findings that both articles in both cases relied upon stereotyping. In order to determine whether

contradictory stereotypical depictions are products of different stereotypical knowledge, the first half of this chapter brought the two cases together for comparative synthesis. It was found that in both cases, Japan was defined by the following three traits: that it was unique, unknowable, and unchanging. Stereotyping—and by extension Orientalism—emphasises group homogeneity and the core differences between one's own group and the perceived outgroup (Hewstone et al. 1992). The perception of Japan as unique is a manifestation of this emphasis of difference, positioning Japan as at odds with other countries. The characterisation of Japan as unknowable is an example of this, too, as well as a feature of Orientalism, which positions the West as the norm, and countries perceived as non-Western as aberrant. Lastly, the depiction of Japan as unchanging, either as always behind or always ahead, is typical of Orientalist discourse, under which the East is in a fixed state.

This last point was found to be particularly salient in explaining how contradictory depictions could form. While both depictions—of Japan as low-tech and Japan as high-tech—are based on the same stereotypical knowledge of Japan as unique, unknowable, and unchanging, it is the ways in which this knowledge is used that leads to these different, and seemingly contradictory depictions. In the low-tech Japan example, this stereotypical knowledge was filtered through Saidian Orientalism, in which Japan is placed in a fixed past, technologically inferior to the West, resulting in the stereotypical depiction of Japan as low-tech. Meanwhile, in the high-tech example, the same stereotypical knowledge was filtered through Techno-Orientalism, which while it maintains Western superiority, places Japan in a fixed future, technologically more advanced in the West, but morally inferior to the West, resulting in the depiction of Japan as high-tech.

With the formation of contradictory depictions explained by the activation of different forms of Orientalism, the chapter moved on to the additional, fourth subsidiary question. This question arose as a result of the findings of the example technology chapters which had answered the third subsidiary question pertaining to the evidencing of depictions, but had proved to be insufficient in explain the persistence of depictions. The chapters showed that news depictions were at odds with empirical fieldwork, which leaves the problem of how these depictions can continue to be perpetuated if they cannot be evidenced.

One proposed explanation was that journalists do not have the specific expertise to write about Japan without resorting to preconceptions and stereotypical depictions

rather than using evidence, which is shown by the well-documented decline of the foreign correspondent. Many British publications have reduced the number of dedicated foreign correspondents employed, and are instead finding alternative means for reporting international news. Many foreign correspondents now work on a freelance basis (Moore 2010, 31), which was the case for two interviewed journalists. Alternatively, a news publication will have a dedicated foreign correspondent on their payroll, but one who covers a whole region, and not just one country, like Journalist 3 (Journalist 3 2016). Some publications only have journalists working from the foreign desk back in the UK (Moore 2010, 31), and these journalists gather material for articles from newswires and foreign news sources, but also take advantage of social media, obtaining information and footage from those already on the ground (2010, pp. 47f).

Thus, given the low number of foreign correspondents writing for British publications on Japan, many of the articles from the samples were likely to have been written in the UK, based on second-hand information, rather than acquired directly by the journalist. Indeed, the prevalence of stereotypical knowledge is indicative of articles written by a journalist with no specialist knowledge of Japan, reducing complex situations to simple explanations. As an issue of perception, if there are fewer journalists working in Japan, then their knowledge of Japan will be limited to information received from newswires and other sources, which limits the potential for a news article to give a comprehensive overview and analysis of a situation. Even those journalists working in Japan are limited by their perception. During interviews with journalists working in Japan, several responded that faxing was commonplace in Japan and cited examples from their own experiences. These were most commonly when trying to get an interview arranged, which entailed faxing an interview request form. This is a very specific scenario, however, and is not one that everyone would find themselves in.

A second explanation was also proposed: that editorial demands and systemic pressures result in the typification of a story, leading to generalisation and exaggeration, both qualities of stereotyping. Interviews showed that editors did often require stories about Japan which conformed to topics of perennial interest, such as weird Japan. In the case of robots, one interviewed journalist admitted that when they had seen Pepper, they had found the robot underwhelming. The chapter showed that robots are sometimes the subject of hype, in which the story is exaggerated and made to seem more significant than it really is. Hype can be generated by the news

article, often at the behest of the editor, who is looking for a more interesting story, but also by other sources, too. Concerning robots, according to Journalist 1, manufacturers will often hype themselves in the way they go about unveiling the robot and in press releases (Journalist 1 Interview 2016). Journalists will rewrite their articles so that they conform to this hype because it is required for them to get paid. As one interviewee explained, many journalists have moved away from the field, because it is difficult to earn enough money on freelancing alone. While some journalists do other work to supplement their pay, others have left journalism to work in other parts of the private sector, such as in higher education or consultancy.

This chapter has thus argued that these depictions of Japan are the products of specific perceptions, resulting variously from those writing about Japan from the UK with limited knowledge and experience of Japan and the news being reported, from those Japan-specialists based in Japan but writing from their own experience, from the demands of the editor looking to propagate their perception of Japan, and from the need to add 'hype' to stories in order to attract an audience to the article. These depictions, while seemingly contradictory, are underpinned by the same stereotypical knowledge of Japan as having a unique culture, of Japan as having a unique relationship with technology, of Japan as different, and of Japan as weird. It is in the application of this knowledge that difference in depiction arises. In the case of low-tech Japan, this stereotypical knowledge was filtered through Saidian Orientalism, whilst in the case of robots in Japan, it was Techno-Orientalism that was employed.

The next chapter will conclude this thesis, summarising the findings of the cases and the main points of the argument, finalising the process of triangulation required in order to address the research question.

Chapter 7: Conclusion

Since Lippmann first coined the term stereotype in 1922 (Lippmann 1997), studies have examined the ways in which stereotyping has perpetuated inaccurate depictions of groups in all forms of discourse. Lippmann described stereotypes as ‘pictures in our heads’ (1997, 3), and they are just that: static images of particular groups, snapshots. Allport would later describe the process of stereotyping as ‘selective perception and selective forgetting’ (1954, 196), whereby groups are perceived to possess particular traits, ignoring differences within these groups (1954, pp. 194-196). It is generally agreed that stereotyping is a form of categorisation (Allport 1954; Gilman 1985; Fiske & Taylor 1991; McGarty 2002) and is a process that helps a person to understand the world (Lippmann 1997, 59).

While a useful tool for understanding the world, stereotyping is problematic as the categorisation of groups by generalised characteristics leads to exaggeration and inaccuracy. Studies have shown how numerous groups have been stereotyped, such as black males (The Opportunity Agenda 2011), nurses (Bridges 1990), the elderly (Vasil & Wass 2006), those with mental illness (Wahl 1992) and Muslims (Semaan 2014), and this is highly visible in the media. Indeed, Lippmann (1997) coined the term in order to discuss generalisations in the news.

In a climate where fake news has dominated headlines across the world, it is important to engage critically with news articles. While different from fake news, which is intentional misinformation and misrepresentation (Allcott & Gentzkow 2017; Collins 2017), stereotyping has been shown by studies such as those above to be problematic nonetheless. In spite of these studies, which have revealed such stereotyping, these depictions persist. Moreover, previous studies start from a position that stereotypes are inherently false (Seiter 1986, 19), and focus on attributing blame to the journalists. This thesis thus set out to examine why stereotypical depictions of groups are perpetuated in the press, focussing on the British press, which is highly diverse in comparison to other countries’ national press (Newsworks 2018), and is also consumed on a global scale (Thurman 2007). The author chose the representation of Japan as the case to study, because Japan is geographically and culturally distant from the UK and an infrequent travel destination for Britons (JNTO 2016; ONT 2016). For many people, the news is therefore one of their only sources of knowledge about Japan.

A previous study of British news reporting of Japan established that technology was a common theme in news articles, indicating that the British have the idea that Japan is a 'nation eccentrically passionate about gadgets' (Hargreaves et al. 2001, 24). This same study also found that in addition to an interest to stories about an eccentric Japan, British news reporting of Japan is often concerned with Japan when it has an impact on the British (2001, pp. 3-31).

Since that study took place, one of the biggest events to occur in Japan that had an effect on a global scale was the 2011 Tohoku Earthquake and subsequent nuclear disaster at the Fukushima Daiichi nuclear power plant. When the disaster occurred, some expected the robot ASIMO to be deployed on-site to solve the problem (The Telegraph 2011), but contrary to expectations, there were no robots in Japan fit for this purpose. It was then found that articles had previously countered this expectation, such as a *BBC News* article from 2010 which talked about Japan's 'low-tech belly' in contrast to its high-tech image (Fitzpatrick 2010). Moreover, it was found that since 2012, multiple articles in British news publications have been written about Japan's use outdated technologies, in particular the fax machine (Oi 2012). However, a preliminary analysis found that this has not stopped articles being written about Japan being technologically advanced, and using robots. This presented something of a puzzle: how can two depictions of Japan, one of a technologically advanced country and the other a technologically behind country coexist? This puzzle became the focus of this study, leading to the following research question:

To what extent are contradictory depictions of technology in Japan in the British press rooted in stereotyping, and how can they coexist?

To approach this overarching question, three subsidiary questions were developed, each addressing an aspect of the larger problem:

- 1) To what extent are stereotypical depictions present in news articles about technology in Japan?
- 2) Are contradictory stereotypical depictions products of different stereotypical knowledge?
- 3) Are contradictory stereotypical depictions supported by evidence?

The aims of this study therefore were to go beyond just the demonstration of misrepresentation of Japan, as other studies have done, such as Matsumoto (2002)

or Morton (2003), but also to analyse the contradictory nature of these depictions and explain how they persist, in spite of their apparent incompatibility.

In order to further guide this study, a set of key concepts was developed, which consisted of: **Stereotypical Depictions**, which are the specific instantiations of a stereotype; **Orientalism**, which is the specific stereotyping of Eastern cultures, or the 'Orient' wherein the West is seen as superior; **Othering**, which is the representation of non-Western others, which can take the form of stereotyping and Orientalism; **East vs West Dichotomy**, which is the assumption that there is an objective distinction between the 'East' and the 'West', and serves to emphasise difference, as well as the superiority of the one over the other; **Discourse**, which refers to a way in which something is spoken about, that is the kind of language that is employed and the social context in which it is said; **Fax**, which refers to the fax machine, a device used to transmit copies of a document over a telephone line or the Internet; and **Robot**, which although refers to any programmable machine, this study took to mean the humanoid robot, as this is the robot that has been most common in popular imagination ever since Čapek first coined the term in 1920.

Having established these key concepts, the study could then move onto a survey of the relevant literatures in order to ascertain what had already been written on the subjects, and where the gaps in the research were.

Literature Review

The literature review carried out in Chapter 2 addressed three main strands of literature that were identified as relevant to the study, these being: literature about stereotyping, literature about Orientalism, and literature about stereotyping and Orientalism in the media specifically.

Within each strand of literature, the review looked at the broad topic, before looking at studies relating to Japan specifically. In terms of stereotyping, the literature showed that stereotyping is a universal problem of perception, a consequence of the brain's attempt to cope with large amounts of information by creating a cognitive short-cut that uses prior experience to categorise new experiences (Lippmann 1997, 59). While they are beneficial in making daily experiences understandable, generalisations do have the negative consequence of reducing national, ethnic and religious groups to generalised categories. Moreover, stereotypes have the problem that they are fixed (Allport 1954, 191), and the review found that many of the stereotypical depictions of Japan can be traced back to Europeans' first encounters

with the Japanese in the 16th Century (Littlewood 1996, 3; Lozano-Méndez 2010, 184). Matsumoto (2002) has attempted to dispel some of these stereotypical depictions, but while he provides invaluable insights, ultimately he fails to justify his choice of 'common' stereotypical depictions of Japan and employs terminology inconsistently.

One common issue among the literature is that the term 'stereotype' is defined differently in different fields, and some studies have used various terminologies without clear precision (e.g. Matsumoto 2002). This study thus chose to employ McGarty's taxonomy for stereotyping, which distinguished between the stereotype and the stereotypical depiction. The term stereotypical depiction was coined by McGarty to refer to specific instantiations of the stereotype, which he argues is the set of relations between knowledge, labels and perceived equivalences of a group (2002, 18-33).

Orientalism was shown to be the specific categorisation of the East, famously described by Said (1978) as the domination of the West over the East (1978, 2). Orientalism is at its core the reinforcement of Western superiority through the creation of an idealised, traditional and less-advanced East (Said 1978; Macfie 2000). Said argued that while he focussed on the Middle East, Japan is part of the Orientalised East (or 'Orient'), and the Literature Review found that two off-shoots of Orientalism had been applied to Japan: Self-Orientalism (Miller 1982) and Techno-Orientalism (Lozano-Méndez 2010; Morley & Robins 1995). Self-Orientalism is the idea that Japan intentionally Orientalises itself, distinguishing itself from the West in order to strengthen its own identity (Gluck 1985; Iwabuchi 1994). Indeed, in Japan *Nihonjinron* or 'theories about the Japanese' was a popular field of study (Iwabuchi 1994), but was also considered a form of nationalism (van Wolferen 1989). Meanwhile, Techno-Orientalism is the characterisation of Japan as a hyper-technified Other, defined by its futuristic technology and materialist society (Lozano-Méndez 2010, 183). Techno-Orientalism's focus on technology was determined to be particularly salient to this case study, particularly as it accounted for the depiction of a technologically advanced East, which Saidian Orientalism does not. On the other hand, Self-Orientalism was deemed to be irrelevant for this specific research, since the study was concerned primarily with British depictions of Japan, rather than Japanese depictions of Japan.

The Literature Review also looked at studies on these forms of Othering in the press specifically. A study by Hargreaves et al. (2001, 29) found that British news media

often fall back on stereotypical depictions of Japan, and many of these stories exist for the purposes of entertainment. Hinton (2014) also found that there were common 'tropes' about Japan in the British media, but none of these studies explained contradictory depictions, nor the reason for their persistence. While not specific to Japan or contradictory stereotypical depictions, Lasorsa and Dai's research (2007) offered a number of reasons for why stereotyping continues in the media: a sociological perspective, a cultural perspective, and a psychological perspective (2007, 281). Their explanations correspond with this thesis' own preliminary explanations: that journalists typify events through stereotyping to make their job easier, or stereotyping occurs as a result of 'job demands' (2007, 281). This study closely relates to the findings of an earlier study by Donsbach (2004, pp. 134-136), who argued that news reporting is subjective as it is determined by the perspectives of the journalists or the beliefs of the publication. Although these studies would prove useful for devising a methodology, they could not adequately resolve the puzzle of contradictory depictions, necessitating new research.

Methodology

Having surveyed the literature available, the Methodology chapter (Chapter 3) then set out the ways in which the thesis would address the research problem. Since this problem was broken down into three subsidiary questions, a multimodal research strategy was required that could address the different aspects of each question. A case study research strategy was adopted in order to analyse examples of depictions of Japan and technology in the British press, using two cases to illustrate different examples of technology stories. Since stereotyping is, by definition, 'shared exaggerations or caricatures' of the social world (Brauer et al. 2004, 191) and thus the depiction of something in extreme terms, the two cases selected represented opposite ends of such extremes, on the one hand Japan as very low-tech, in the form of Japan as a fax-using nation, while on the other hand, depictions of Japan as a technologically advanced nation, represented by the articles about robots in Japan.

In order to address each of the subsidiary questions, the research strategy was incorporated methods best suited to each question, following the general design of case study research, which relies on three primary methods: document review, observation and interview (Stake 1995, 144). For the first subsidiary question, it was necessary to analyse news articles themselves to assess the extent to which they

appealed to stereotypical depictions. The thesis combined the different analytical approaches of prominent critical discourse analysts, chiefly Norman Fairclough (Fairclough 1992; Fairclough & Wodak 2009) and Teun van Dijk (1993a; 2009), streamlining the methods into a concise, step-by-step analytical process. In addition, the author built on van Dijk's assertion that discourse is inherently the emphasis of an us vs them dichotomy (2009, 71) in order to explicitly incorporate the analysis of Orientalism as it appears in news articles, based on the definitions of Orientalism and the Japan-specific Techno-Orientalism provided by Said (1978) and Morley and Robins (1995) respectively.

The second subsidiary question asked whether stereotypical depictions contributed to the formation of contradictory depictions of Japan. This was achieved through a comparison of the results of the analyses of news articles, comparing the two samples' context, structures, and rhetoric and meaning, based on the same analytical framework employed in the CDA. The two samples were compared on these three categories, showing where they displayed similarities and where they bore differences. These similarities and differences were then analysed within the context of Orientalism, in both the original, Saidian form, and Techno-Orientalism.

Lastly, the third subsidiary question asked how these depictions can be evidenced. While stereotypical and Oriental discourse could be detected, this did not mean that the claims made in the articles about technology in Japan were necessarily untrue. Thus, in addition to document review, the research strategy employed two further methods: observation and interviews. These methods required the carrying out of fieldwork in Japan, which was conducted over the course of two trips, in October 2015 and then again in October 2016. These trips were used to gather data, conduct observations at locations in Tokyo, and interview participants in Tokyo, Nagoya, Kyoto and Sasebo, near Nagasaki.

For each example technology, observations and interviews were carried out in order to test the claims revealed in the critical discourse analysis (CDA). Observations involved visiting locations where the technologies were likely to be in use or sold, based on readings of the news articles: for fax machines, electronics department stores were visited as well as the offices of companies who had agreed to be interviewed; meanwhile, for robots, known locations of robots gleaned from news articles, such as department stores, shopping centres, hotels and theme parks were visited, and usage of robots was observed and tested.

Similarly, interviews were arranged with the manufacturers of both technologies in order to ascertain the state of development of the technologies, their current usage in Japan, and their future. In addition, companies were interviewed on their use of the technologies. For the fax machine example, a purposive sample of companies representing different industries was interviewed on their use of fax machines, with particular focus on the use of fax instead of other, more recent technologies. For the robot example, companies known to be using robots, based on news articles analysed for the CDA, were interviewed on their current use of robots, with particular focus on ascertaining how accurate depictions in the British press were.

An accusation often levelled at journalists in other studies (such as Zipangu 1998) is that they are responsible for the depictions, and rely wholly on stereotypes, with little expert knowledge of the country. Given the number of studies that have disputed stereotypical depictions of Japan (e.g. Hinton 2014, Matsumoto 2002), if these depictions cannot be evidenced, how can they persist? This aspect would be assessed through interviews with journalists as well as with a foreign editor, in order to gain the journalistic perspective on the production of British news reporting about Japan.

The use of multiple methods is the strength of case study research, as each method addresses the research question in a different way, but their findings can be used in a process of triangulation in order to find the answer to the research question. These findings have been summarised below, broken down into the individual steps that were taken towards answering the research question.

Low-Tech Japan

The first example technology was selected to represent the depiction of low-tech Japan in British news articles. Chapter 4 examined a body of articles about fax machine use in Japan and compared these depictions with fieldwork carried out in Japan at Japanese companies. Within the timeframe of the sample, a clear progression could be seen of fax moving away from being a normal, everyday technology as far as British publications was concerned, towards being an antiquated, mostly abandoned technology. In earlier articles, usage of fax in Japan was mentioned as a matter of fact in passing and was in unmarked language. It was not until 2012 when a shift in depiction can be observed (*BBC News* 2012), in which the technology is presented as one that has all but faded from common use, with the exception of Japan, where it persists, due to a cultural attachment to the device. Articles from this point on discuss

Japan's fax use as being incredibly high and a consequence of an unwillingness to move forward. CDA of these articles revealed that often articles appealed to stereotypical depictions of Japan, made statements that relied upon commonly held assumptions about Japan, and used language that made Japan out to be childish or immature (see Chapter 4).

The second half of the low-tech Japan example technology chapter was given over to the analysis of fieldwork carried out in Japan in order to test the claims made by news articles in the sample, as per subsidiary question 3. Interviews were arranged with fax machine manufacturers, as well as a sample of companies, comprising businesses of different sizes and industries. Interviews with manufacturers found that the fax industry was shrinking, with the manufacturers no longer producing dedicated standalone units, and the manufacturers did not consider Japan to be the most significant market. Moreover, interviews with companies found that by and large companies use email for the majority of their communications, with faxing reserved for specific purposes. While some companies faxed more than others, it could be explained by the age of the staff member doing the communications, or the purpose: for example, bank communications are done by fax because it is seen as being secure. The pragmatism of fax use was at odds with the explanations given in news articles, which appealed to culture and tradition, heavily emphasising stereotypical knowledge.

High-Tech Japan

The analysis of news articles referring to robots for the high-tech example technology in Chapter 5 showed there to be a similar stereotyping of Japan when it came to reporting robots. Discourse centred on a Japanese obsession with robots, with many articles based on the unqualified assumption that robots are already widely used in Japan. In terms of the development and implementation of new robots, articles attributed this to a long-standing affinity for robots, emphasising the cultural differences between Japan and the UK, as well as to changing demographics, as Japan's population is ageing, putting a strain on social care as well as a decrease in the size of the working population (see the CDA in Chapter 5).

As with the first example technology, interviews were carried out with robot manufacturers and robot-using companies during a period of fieldwork in Japan in order to assess the degree to which articles exaggerated their claims through

stereotyping and Orientalism. Interviews with robot manufacturers showed that robots are indeed being developed for public-facing functions, and some are already in use, most notably the robot Pepper, but in many cases these robots are still in the testing phase and are not quite ready for full deployment, with many manufacturers aiming for release in 2020 (Toshiba Interview 2016). Pepper is the exception to this rule, as interviews with a Nestlé representative found, as the use of Pepper in department stores across Japan has helped boost sales of Nescafe coffee machines. However, even in this case, it was admitted that it was in part a marketing gimmick (Nestlé Interview 2016). Interviews at the Henn-na Hotel found that the descriptions of the hotel found in news articles were exaggerated, as there were no real humanoid robots working at the hotel, only animatronics, and despite a lot of processes being automated, human staff were still necessary for things like cleaning (Henn-na Hotel Interview 2016). Robot use, while high, was thus not as extensive as news articles claimed, since these often assumed that the technology was ubiquitous.

Comparative Synthesis

The stereotyping and Orientalising found across both case studies possess a number of commonalities, despite referring to seemingly very different sides of Japan: the country as technologically-backward, and the country as technologically ahead. In Chapter 6, the two case studies were brought together to analyse these commonalities, as well as their differences. In both case studies, it was found that articles attributed the depicted level of technology to similar stereotypical ideas about Japan:

- 1) Japan as unique
- 2) Japan as unknowable
- 3) Japan is unchanging

These three stereotypical depictions of Japan above are used to explain and rationalise both Japan's apparent lack of technological uptake as well as its status as technological world leader. Firstly, Japanese culture is used in several ways to account for Japan's continued use of fax machines; cultural facets such as the country's history of calligraphy and letter-writing are proposed as explanations for a resistance to computer-based communication (*BBC News* 2012; *The Independent* 2013), and this is often bounded together with references to tradition and 'ancient' aspects of Japan, such as its temples and geisha (*BBC News* 2005). However, culture

is also used to explain why Japan is technologically advanced, and even the Japanese interviewees in this study appealed to a cultural affinity for robots. Japan is presented as being unique in its adoption of robots, and as the second case chapter (Chapter 5) showed, Japan is depicted as the first and only country to have adopted robots (Mail2007; MailOnline2012e). The extent to which Japan is said to have adopted robots (at least according to articles) is often a source of confusion for the journalist, contributing to this idea of Japan as being unknowable, and incomprehensible (G2001b; DT2003b; MO2014c). Often, the Japanese people are described as being highly different to the British because of their supposed love of robots, something the British mind cannot understand, since associations in the UK are often with science-fiction films about robots rebelling against humanity (BBC2011a; MailOnline2014j; G2006d).

The comparative synthesis found that in both cases, usage of the technologies had been exaggerated to the degree that their usage was seen variously as odd, strange and fascinating (see Chapter 6). Moreover, close comparison found that their depictions bear many similarities, due to an appeal to the same stereotypical knowledge, and identical characterisation of Japan as unique, unknowable and unchanging. While robots are considerably more advanced than fax machines, this thesis argued that the use of one comparatively low-tech technology does not make a country technologically backwards, nor does the use of advanced technology make a country more advanced than others. Rather, these technologies are able to coexist because they are used for different purposes and in different settings. However, through the lens of Orientalism, this nuance was lost, resulting in extreme and apparently dichotomous depictions. It was argued that fax machine-related articles in the first case primarily demonstrated elements of Saidian Orientalism, whereas the robot-related articles of the second case, which appealed more to the Techno-Orientalist view of Japan of the country as hyper-technified (Lozano-Méndez 2010).

The findings of Chapters 4 and 5 therefore challenged Japan's positioning on the visual scale introduced in the methodology chapter (Chapter 3, Figure 3.1) at both ends. Using the findings of the observations and interviews they demonstrated how Japan sits closer to the centre of the scale, rather than at the peripheries (see Chapter 4, Figure 4.8 and Chapter 5 Figure 5.16). The comparative synthesis then showed that Japan does not occupy two discrete points on the scale, but rather that Japan occupies a segment of the scale, representing a spectrum of technology use, where different technologies are used for different purposes at different times (Chapter 6, Figure 6.1).

Although this synthesis demonstrated the extent to which stereotyping, and by extension Orientalising could result in contradictory depictions of technology in Japan, it could not account for why journalists persist in depicting Japan as such, particularly those who have specialist knowledge of Japan.

Journalistic and Editorial Practice

To account for this, a third subsidiary question had originally been proposed, asking to what extent these depictions could be evidenced. It was found in the fieldwork sections of the example technology chapters, however, that the depictions did not line up with the findings of observations and interviews, thus necessitating a fourth subsidiary question:

- 4) If these depictions are not supported by evidence, why do they continue to appear in articles?

In order to account for the perpetuation of these stereotyped and Orientalised depictions of Japan in the British media, the thesis needed to move away from the analysis of the specific texts themselves and focus on their production. Thus, the second half of Chapter 6 focussed on the journalists who write these articles, as well as the editors responsible for commissioning and preparing these articles for publication. Here the thesis considered the role of journalists in the construction of the contrasting depictions of Japan, and their general impact on the perpetuation of stereotypical thought and Orientalism.

Both journalists working in Japan for non-Japanese publications, as well as a foreign editor for a British publication were interviewed. The interviewed journalists had all lived in Japan for an extended period of time and all spoke Japanese, however some interviewees said that many news articles on Japan are being written from the UK (Journalist 1 Interview 2016). Thus, one key issue raised by journalists was the amount of representation Japan receives in the press abroad (Journalist 1 Interview 2016; Journalist 2 Interview 2016). The average Briton is unlikely to have travelled to Japan and thus their knowledge of Japan comes from secondary sources, including newspapers. However, in recent years, fewer publications are employing dedicated foreign correspondents based in Japan, and those that do have a correspondent covering Japan may have this journalist covering the entire of East Asia, and that journalist may be based in Beijing (Moore 2010).

According to the interviewees, many journalists write about Japan from the UK without any specialist knowledge, but the interviews also showed that there are some journalists writing with extensive experience of Japan. In terms of pre-existing perceptions, interviewees' responses to the question of whether faxing is really so common demonstrated that even those living in Japan are still restricted to their own perceptions (Journalist 1 Interview 2016). However, while it may be true for those journalists, who have to fax for specific purposes, it does not align with the broader research carried out for this thesis. Some of the interviewees attributed the inaccurate, stereotypical depiction of Japan to the demands of the editor, saying that the required lengths of articles were too short to give any real depth or necessary context in a story, and that editors often request specific topics, because they are popular with readers (Journalist 1 Interview 2016; Journalist 2 Interview 2016). While the interviewed editor acknowledged that metrics were important, they said that they have journalists write a broad range of stories, including what they considered stories that 'matter' (Editor Interview 2018), as well as more entertaining pieces. The editor did also acknowledge the pressures of time and reduced budget, but saw it as more of a challenge to which journalists and editors alike have to rise in order to produce quality journalism (Editor Interview 2018). This publication, however, was a broadsheet, with a number of subeditors and utilised foreign correspondents, which might differentiate itself from other sources in the sample, particularly as many of the Orientalised articles analysed in the example technology chapters (Chapters 4 & 5) were found in tabloid-style newspapers, such as the *Daily Mail*, and their corresponding websites. It is nevertheless interesting that there was only partial corroboration between the interviewed journalists and the editor on the impact of the editor and job pressures, indicating editors may be unaware of the pressures felt by the journalists.

Significance of Study

Having resolved the puzzle of contradictory depictions of technology and Japan in the British press, which had hitherto been unaccounted for in extant literature, it is now worth exploring the wider significance of the study's approach and its findings.

First, an interdisciplinary approach was adopted in order to carry out the research. This distinguished the thesis from previous studies, which as the literature review in Chapter 2 showed, have typically been single-disciplinary. Indeed, previous studies

of news reporting about Japan have been limited to analysis of news articles alone (e.g. Hargreaves et al. 2001; Zipangu 1998). This, however, ignores the authorship of the texts, and the sources upon which they are based. The study instead draws from disciplines like journalism studies and discourse studies, but also brings in the theory and methods of cultural studies and Japanese studies, resulting in an extensive variety of data and an empirically-rich study.

Secondly, this study employed a multimodal approach, drawing upon different disciplines and their theoretical and methodological approaches to devise a rigorous and wide-ranging methodology. In particular, this study has adapted and simplified the analytical structures of CDA pioneered by Fairclough (1992; 2000; Fairclough & Wodak 2009) and van Dijk (1993; 1998; 2009) leading to the development of a new analytical framework, focussing on three analytical categories: context, structures, and rhetoric and meaning (see Chapter 3). Often CDA is used as a method in isolation, but this streamlined version has been developed so that it can be used as part of a larger research strategy in order to tackle questions that necessitate a multimodal approach. The study was designed with replicability in mind, and the research strategy can be used by other researchers investigating media stereotyping and stereotyping more broadly.

Thirdly, through the interdisciplinary and multimodal methodology employed in this study, this thesis has been able to challenge the depictions of Japan and technology in the British media. While previous studies have shown foreign news representations of Japan to be rooted in stereotyping (Hinton 2014; Kondo 2005; Matsumoto 2002; Zipangu 1998), this study differentiates itself by setting these representations against empirical evidence. In addition, previous studies (Kondo 2005; Zipangu 1998) have blamed the journalists themselves for a lack of knowledge about Japan or an animosity towards the country, whilst studies on news reporting in general have attributed inaccuracies to cognitive laziness (Donsbach 2004; Lasorsa & Dai 2007) or unconscious 'bullshit' (Frankfurt 2005). This thesis differentiates itself by moving away from these attitudes through the inclusion of interviews with figures from the journalism industry in order to explain these depictions.

Wider Implications of Findings

Having shown how this research is distinct from previous research, it is worth considering the wider implications of these findings, of which three interrelated implications have been identified. The first relates to the process of Othering itself, what Pickering called a 'denial of history' (2001, 48). However, as this research has shown, it is also a denial of context. Those journalists interviewed for the study lamented the inability to write longer articles which would give them space to provide contextual information necessary to give a rounded understanding of an event. Instead, Japan remains marked and defined by its difference to the UK, and explorations of difference are the only kind of sensemaking present in the news. The foreign editor who was interviewed said that news stories had to be engaging and drive page views or lead to higher newspaper sales (Editor Interview 2018). In this sense, Japan is also Othered through commodification: the country is reduced to its value as a story. The editor said that the pressures of foreign news reporting was not limited to Japan, but affected world coverage, due to reductions in budgets and, consequently, staff numbers.

This leads to the second implication of the findings: what are the power relations involved in the depictions of Japan? Given these constrictions, how is it determined whether a country is covered in a news publication, and how much coverage should a single country get? This relates to the commodification of Japan, in the previous implication. What this thesis has shown is that in many ways these articles are less about Japan, and more about the British, which is where power lies. The importance of a story is judged by its interest to a British audience. This is most clearly evident in articles about robots in Japan, wherein British concerns about the future of robotics and AI and their impact on jobs and society are expressed. Indeed, this was even admitted by the interviewed foreign editor, who explained that Japan was given precedence because of its importance from a British perspective: in terms of it as a tourist destination, perceived cultural links, and the occurrence of geopolitical events (Editor Interview 2018).

Lastly, building upon the previous two implications, if Japan continues to be reduced to the position of the Other and is considered only in terms of its significance to the UK, how will these stereotypical depictions affect Japan's ability to attract investment and for its relations with other countries? In terms of UK-Japan relations, currently Japan is a significant investor in Britain, investing £46 billion, according to the Department for International Trade (GOV.UK 2018). British investment in Japan is

lower, although not insignificant, with over 450 British firms operating in Japan and British exports to Japan worth £9.9 billion annually (Export to Japan 2018). Japan is thus valued as a trade partner, but business investment in the country could be damaged by stereotypical depictions in the news, which give an inaccurate representation of the use of technology in Japan. If decisionmakers were exposed to the discourse that Japan is low-tech and hesitant to adopt new technologies, then they may refrain from investing in Japan. By the same token, the discourse that Japan is futuristic may lead to unrealistic expectations or even the perception of Japan as an economic threat, as it was in the United States in the 1980s. Following the UK's decision to leave the European Union, also known as Brexit, there is a need to look beyond the European Union for trade, and also maintain investment and trade relations with other nations, including Japan.

Magnusson, Westjohn and Zdravkovic found that the perceived country of origin (COO) of a brand can positively or negatively affect a consumer's impression of that brand and thus influence their buying choices, with consumers possessing 'images of Japan as the place for high-technology innovation and high quality' (Magnusson et al. 2011, 459). This being the case, knowledge of Japan received from depiction in the news does have the potential to affect people's attitudes towards Japan in tangible and measurable ways. If news articles continue to depict Japan as a country using outdated technology, then Japan may lose its recognition as a place for high-technology innovation. This could have negative effects on the sales of Japan's consumer electronics abroad, but also investment in those companies, and investment in Japanese businesses in general. Conversely, while the depiction of a Japan with robots widely diffused in society is considered to be futuristic and positive, such depictions can create unrealistic expectations of Japan and its levels of technology. The example of news responses to the Fukushima disaster illustrate how this depiction of a futuristic Japan has the potential to be quite damaging, when it was assumed that the country would not need international assistance to tackle the problems. The impact of these stereotypical depictions on UK-Japanese relations requires future study, however, and so we now turn our attention to what opportunities for further research this study has opened up.

Looking Forward: Scope for Future Research

While this thesis has explained the coexistence of contradictory depictions of Japan's relationship with technology in the British press, what is the future of such depictions? Within the scope of a PhD thesis, it was only possible to look at two examples of technologies, and while these were able to demonstrate general attitudes and assumptions about levels of technology in Japan, a number of other technologies have been mentioned in the press, such as CDs and flip phones (Millward 2016) and articles about these could be analysed in a future piece of research. Indeed, as the research found, fax use is becoming more uncommon in Japanese businesses, reserved for specific uses, and as such this specific stereotypical depiction may eventually vanish. However, under Orientalism, Japan must always remain in a fixed past, which means that while depictions of a backwards, low-tech Japan using the example of fax machines may disappear, it is highly likely that another technology will take its place. Indeed, as McGarty argues, stereotypical depictions are 'fleeting', but the stereotype is not (2002, 19). As for articles about robots, data shows that robot use is increasing globally (IFR World Robotics 2017): what will this mean for depictions of robots in Japan? As robots become more common, will depictions become less stereotyped? Or will this usage be shown to be different to that in the UK, in keeping with Techno-Orientalism? The Japanese government is aiming for the implementation of robots during the 2020 Summer Olympics in Tokyo (Kemburi 2016), how will this be reported?

While Said included Japan in the 'Orient', he never actually studied the Japanese case, and it has been left to subsequent scholars to apply Orientalism to Japan. This has resulted in the development of multiple offshoots: Self-Orientalism (Miller 1982), Techno-Orientalism (Morley & Robins 1995) and Wacky Orientalism (Wagenaar 2016). This thesis looked at only Saidian Orientalism and Techno-Orientalism, leaving open the possibility of future research. Self-Orientalism is nonetheless significant and should be explored further in future studies, as interviewed journalists alluded to manufacturers hyping their own products, contributing to the exaggeration found in the analysed articles. How has Self-Orientalism affected foreign perceptions of technology in Japan, and has this contributed to depictions in the press?

The findings of this thesis on the effects of stereotyping and Orientalism on the depictions of a Japan's use of technology has bearing on the representation of other countries, too. In recent years, other countries in Asia have become known for their

advanced technology, such as South Korea and China, with these countries expected to overtake Japan in the next ten years (The 21st Century Public Policy Institute 2012). An important finding of this study was how the reporting of technologies in Japan has changed over time. This temporal dimension could also be applied to a study of an emerging technology leader in order to see how depictions have changed, such as China's transition from being known for cheap mass production and imitation to a world leader in technology (Du 2017).

Beyond representations of technology, the media regularly stereotypes many groups, such as ethnic minorities within a country (The Opportunity Agenda 2011), the elderly (Levy 2003), those in certain professions (Bridges 1990), those with mental illness (Wahl 1992), religious groups (Semaan 2014) or the populations of entire regions like Asia (Fiske et al. 2002). This thesis has shown that these depictions can be challenged, not only through exposing stereotyping and Orientalist discourse, but by showing these depictions to be demonstrably inaccurate through empirical observation and interviews.

The modified CDA developed for this study could be adapted to many future studies, offering a clear and streamlined approach to CDA, without compromising on depth. Moreover, by expanding on Fairclough's notion that discourse should be considered in terms of its production, distribution and consumption (Fairclough 1992, 73), this thesis has shown the value of augmenting textual analysis with these other methods. For example, the example given above of depictions of technology in China could be tested through this multimodal approach, combining the CDA of news articles about technology in China with statistics, observations of technology use and production, as well as interviews with technology companies in China. The analytical framework for CDA developed for this thesis does have the limitation, however, that it is not a sufficient method in isolation. In its simplified form, the analytical framework is designed to be paired with other methods to augment its findings. As such, this framework would not suit a study based purely on CDA, which would require a more detailed and comprehensive framework.

However, in a multimodal case study like this thesis, this simplified CDA has its advantages. It was only through the triangulation of these methods that the study was able to show the importance of the editor, the audience, and the current climate for foreign journalism for propagating stereotypical depictions of Japan. The editor's control over what constitutes as newsworthy is particularly salient in a time where fake news is perceived to be everywhere. If editors are requesting that articles to

written on specific topics, then they are essentially generating news stories. The articles analysed in this study were not fake news, but they were not wholly accurate news, either. The reduction of foreign news correspondents employed by British publications, a problem affecting other countries, too, has raised concerns about the accuracy and depth of foreign news reporting, with those remaining foreign correspondents under increased pressure and workloads. It is imperative now more than ever for news publications to be able to demonstrate their commitment to accuracy, particularly in an environment where there is a heightened awareness of fake news. While this has mostly been associated with social media (Allcott & Gentzkow 2017), it is having serious consequences for traditional journalism, which is losing public trust (Ball 2018). So long as the number of foreign correspondents remains low, the reliance upon articles written by non-specialists basing their reporting on stereotypical depictions will remain, affecting accuracy. It might not always be depicted as technology obsessed, but Japan will remain characterised by its exceptionalism: as weird, as unique, and, fundamentally as different.

Appendix 1: Low-Tech Japan Articles

The table below lists the articles sampled for the first example technology, discussed in Chapter 4. As the methodology explained, searches were carried out using LexisNexis or the publication's own website, filtering articles based on the keywords 'Japan' and 'fax', using Boolean modifiers, between 2000 and 2015 in the nine selected publications.

Publication	Number of Articles	Date	Article Abbreviation	Mention of 'Japan'	Mention of 'fax'
BBC	5 (online)	12 January 2000	BBC 2000	9	1
		20 September 2005	BBC 2005	12	1
		25 August 2010	BBC 2010	3	1
		31 July 2012	BBC 2012	11	18
		3 November 2015	BBC 2015	16	5
Daily Mail	1 (print)		Daily Mail 2001	3	3
The Guardian	3 (print) 5 (online)	16 August 2000	The Guardian 2000	2	1
		18 January 2003	The Guardian 2003a	2	1
		18 June 2003	The Guardian 2003b	4	1
		6 January 2004	The Guardian 2004	1	1
		10 May 2007	The Guardian 2007a	10	3
		28 September 2007	The Guardian 2007b	1	1
		20 June 2009	The Guardian 2009	1	1
28 June 2014	The Guardian 2014	3	1		
Daily Telegraph	1 (online)	28 April 2008	Daily Telegraph 2008	4	1
Daily Mirror	1 (print)	28 February 2002	Daily Mirror 2002	7	1
The Independent	1 (online)	14 February 2013	The Independent 2013	13	18
Metro	1 (online)	25 August 2010	The Metro 2010	2	1

Table A1.1 Articles Yielded from Keyword Search of 'Japan' and 'Fax', in Articles Between 2000 and 2015

Appendix 2: High-Tech Japan Articles

The table below lists the articles sampled for the second example technology, discussed in Chapter 5. As the methodology explained, searches were carried out using LexisNexis or the publication's own website, filtering articles based on the keywords 'Japan' and 'robot', using Boolean modifiers, between 2000 and 2015 in the nine selected publications. Due to the ambiguity of the term robot, articles were manually filtered for references to humanoid robots, the focus of the analysis.

Publication	Number of Articles	Date	Article Abbreviation	Mention of 'Japan'	Mention of 'robot'
BBC News	30 (online)	19 March 2002	BBC2002	1	10
		21 August 2003	BBC2003	6	8
		16 January 2004	BBC2004a	4	9
		11 March 2004	BBC2004b	4	14
		30 August 2005	BBC2005a	4	9
		18 November 2005	BBC2005b	7	20
		8 July 2009	BBC2009a	8	8
		3 September 2009	BBC2009b	8	8
		16 May 2010	BBC2010a	2	5
		11 November 2010	BBC2010b	3	2
		4 February 2011	BBC2011a	20	46
		24 February 2011	BBC2011b	2	6
		24 February 2011	BBC2011c	1	3
		27 February 2011	BBC2011d	2	5
		19 July 2011	BBC2011e	2	3
		22 October 2013	BBC2013a	4	2
		4 November 2013	BBC2013b	4	4
		16 November 2013	BBC2013c	4	26
		23 December 2013	BBC2013d	3	14
		3 March 2014	BBC2014a	5	4
		24 April 2014	BBC2014b	1	3
		27 May 2014	BBC2014c	3	21
		5 June 2014	BBC2014d	4	14
		14 July 2014	BBC2014e	3	2
		2 June 2015	BBC2015a	1	4
		18 June 2015	BBC2015b	5	9
17 July 2015	BBC2015c	9	10		
15 September 2015	BBC2015d	4	13		
7 October 2015	BBC2015e	2	29		
25 November 2015	BBC2015f	3	10		
Daily Mail	26 (online)	30 July 2012	MailOnline2012a	1	5
		13 September 2012	MailOnline2012b	5	6
	5 (print)	18 February 2013	MailOnline2013a	3	7
		4 August 2013	MailOnline2013b	8	18
		24 December 2013	MailOnline2013c	7	15
		24 April 2014	MailOnline2014a	16	5
		21 May 2014	MailOnline2014b	2	13
		4 June 2014	MailOnline2014c	3	6
		5 June 2014	MailOnline2014d	9	18
		5 June 2014	MailOnline2014e	6	18
19 June 2014	MailOnline2014f	1	6		

		28 July 2014 7 October 2014 23 October 2014 20 November 2014 4 December 2014 29 January 2015 4 February 2015 9 February 2015 22 June 2015 28 June 2015 13 July 2015 8 September 2015 15 September 2015 30 November 2015 2 December 2015	MailOnline2014g MailOnline2014h MailOnline2014i MailOnline2014j MailOnline2014k MailOnline2015a MailOnline2015b MailOnline2015c MailOnline2015d MailOnline2015e MailOnline2015f MailOnline2015g MailOnline2015h MailOnline2015i MailOnline2015j	8 6 7 11 4 5 8 11 8 2 7 6 3 7 8	18 23 27 15 11 6 14 17 16 4 16 8 16 18 21
		26 October 2003 7 September 2004 27 April 2007 18 May 2010 5 August 2013	Mail2003 Mail2004 Mail2007 Mail2010 Mail2013	5 6 3 2 1	1 1 23 3 5
The Guardian	8 (online) 10 (print)	8 August 2007 29 November 2009 4 February 2015 27 February 2015 6 June 2015 14 August 2015 29 September 2015 31 December 2015 22 November 2000 5 April 2001 2 August 2001 11 September 2003 27 November 2003 28 March 2005 3 May 2005 5 January 2006 2 November 2006 10 November 2007	GO2007 GO2009 GO2015a GO2015b GO2015c GO2015d GO2015e GO2015f G2000 G2001a G2001b G2003a G2003b G2005a G2005b G2006a G2006b G2007	4 5 3 6 2 6 5 9 5 7 8 13 3 2 6 10 9 2	22 10 12 15 12 13 19 20 10 16 3 6 21 2 27 35 36 28
Daily Telegraph	9 (print)	22 May 2002 7 February 2003 1 December 2005 26 December 2005 4 December 2010 18 March 2011 5 August 2013 6 September 2013 9 May 2015	DT2002 DT2003 DT2005a DT2005b DT2010 DT2011 DT2013a DT2013b DT2015	1 5 7 8 3 2 3 8 1	2 8 19 6 15 7 1 5 1
Daily Mirror	9 (online) 18 (print)	25 June 2014 30 October 2014 5 February 2015 24 February 2015 15 September 2015 3 December 2015 30 March 2002 10 April 2002 17 February 2004	MO2014a MO2014b MO2015a MO2015b MO2015c MO2015d M2002 M2003 M2004	3 5 5 2 5 3 1 1 2	5 8 11 7 26 15 9 4 13

		18 March 2005	M2005a	4	10
		19 March 2005	M2005b	1	2
		6 June 2005	M2005c	1	1
		17 March 2009	M2009	1	3
		17 May 2010	M2010	2	5
		25 February 2011	M2011	1	3
		19 January 2012	M2012	1	1
		5 August 2013	M2013	2	4
		2 May 2014	M2014	1	1
The Independent	5 (print) 16 (online)	12 May 2001	I2001	11	1
		12 October 2005	I2005	3	36
		27 January 2007	I2007	24	5
		17 May 2010	I2010	5	14
		6 June 2014	I2014	1	1
		3 July 2013	IO2013a	2	6
		4 August 2013	IO2013b	5	11
		5 August 2013	IO2013c	7	11
		9 August 2013	IO2013d	2	4
		5 June 2014	IO2014a	4	7
		23 July 2014	IO2014b	6	12
		1 December 2014	IO2014c	1	10
		5 February 2015	IO2015a	8	13
		9 February 2015	IO2015b	1	11
		10 February 2015	IO2015c	3	18
		22 June 2015	IO2015d	2	14
		27 June 2015	IO2015e	2	23
		16 July 2015	IO2015f	4	3
		22 July 2015	IO2015g	2	28
		7 September 2015	IO2015h	3	12
		28 September 2015	IO2015i	1	3
IB Times	5 (online)	5 September 2013	IBT2013	5	8
		24 April 2014	IBT2014a	8	4
		6 June 2014	IBT2014b	3	5
		24 October 2014	IBT2014c	4	17
		24 February 2015	IBT2015	3	10
Metro	8 (online)	17 October 2010	TM2010a	3	4
		25 October 2010	TM2010b	2	7
		12 November 2010	TM2010c	5	7
		24 February 2011	TM2011	4	10
		27 August 2012	TM2012a	2	7
		6 September 2012	TM2012b	3	5
		4 August 2013	TM2013	4	8
		9 January 2015	TM2015	1	5
Sky News	4 (online)	24 April 2014	Sky2014a	3	7
		5 June 2014	Sky2014b	2	6
		23 July 2014	Sky2014c	4	11
		22 June 2015	Sky2015	2	9

Table A2.1 Articles Yielded from Keyword Search of 'Japan' and 'Robot', in Articles Between 2000 and 2015

Appendix 3: Questions for Low-Tech Japan Interviews

There were two main sets of questions: a set of questions for companies on their use of fax, and a set of questions for fax manufacturers. In both cases, these questions represent the main questions asked, but as the interviews were semi-structured, there were specific questions posed to specific companies and manufacturers. Note that interviews were conducted in Japanese, but the questions have been reproduced in English for readers who may not speak Japanese.

Interview Methods Table

Interviewee	Status	Source	Format	Length	Recording
Category 1: Manufacturers					
Fax Manufacturer 1	Conducted in person	Sample frame	Semi- structured	38m	Audio recording
Fax Manufacturer 2	Conducted in person	Sample frame	Semi- structured	40m	Audio recording
Fax Manufacturer 3	Conducted via email	Sample frame	Structured	N/A	Email Interview
Category 2: Companies					
Company 1 IT Company	Conducted in person	Sample frame	Semi- structured	20m	Audio Recording
Company 2 Construction Firm	Conducted in person	Snowball	Semi- structured	20m	Audio Recording
Company 3 Printing Company	Conducted in person	Snowball	Semi- structured	25m	Concurrent notes
Company 4 Fax Marketing Company	Conducted in person	Sample frame	Semi- structured	57m	Audio Recording
Company 5 Food Ordering Service	Conducted in person	Sample frame	Semi- structured	20m	Audio Recording

Company 6 Property Lettings	Conducted in person	Sample frame	Semi-structured	40m	Concurrent notes
Company 7 IT Consultancy	Conducted in person	Sample frame	Semi-structured	20m	Audio Recording
Company 8 Construction Firm	Conducted in person	Sample frame	Semi-structured	45m	Audio recording
Company 9 Newspaper	Conducted via email	Sample frame	Structured	N/A	Email Interview
Company 10 IT Consultancy	Conducted via email	Sample frame	Structured	N/A	Email Interview

Table A3.1 Interview Methods Table for Low-Tech Japan Interviews

Interview Questions for Companies

1. Could you tell me a little about your company?
2. Do you use fax in your company?
3. What do you use it for?
4. Is fax a frequent form of communication for you? What percentage of communications are carried out by fax?
5. In the Internet age, there are many forms of communication, and some would say that email is more convenient. Do you agree?
6. Are there times when faxing is absolutely necessary?
7. What advantages does faxing have over newer technologies?
8. What is faxing's main appeal?
9. Faxing has remained popular in Japan longer than in other countries. Why do you think this is?
10. Is faxing a part of Japanese culture?
11. There are depictions abroad of Japan as a faxing country. What do you think of this depiction?
12. Japan is sometimes referred to as a paper-based country. Do you agree with this? Does your company use a lot of paper?
13. Is your fax use decreasing at all?
14. Do you think faxing has a future?
15. Do you personally have a fax at home?

Interview Questions for Fax Manufacturers

1. Why does your company still produce fax machines?
2. Is the fax machine being produced mostly for the personal or business market?
3. Is the fax machine produced mostly for the domestic market?
4. What demographics are the fax machine's key consumers in Japan?
5. How does the Japanese market differ to other markets?
6. Do sales of homefax vary in different parts of Japan?
7. How much of your advertising is done in-house?
8. How do you advertise the fax machine in Japan? Print media? Online ads? Television commercials?
9. Is there a difference in the way fax machines are marketed to other products?
10. What is the main attraction of fax machines?
11. Does the fax machine still have advantages over newer alternatives?
12. Why has the fax machine had a longer lifespan in Japan than in other countries?
13. Are fax machines keeping up with current technologies?
14. Does the fax machine have a future?
15. Does your company use fax machines?
16. Do you think fax machines are better for certain kinds of communication than alternatives like email?

Appendix 4: Questions for High-Tech Japan Interviews

There were two main sets of questions: a set of questions for companies on their use of robots, and a set of questions for robot manufacturers. In both cases, these questions represent the main questions asked, but as the interviews were semi-structured, there were specific questions posed to specific companies and manufacturers.

Interview Methods Table

Interviewee	Status	Source	Format	Length	Recording
Category 1: Manufacturers					
Robot Manufacturer 1: Toshiba	Conducted in person	Sample frame	Semi-structured interview	20m	Audio recording
Robot Manufacturer 2: Toyota	Conducted in person	Arranged at technology expo	Semi-structured interview	6m	Audio recording
Category 2: Robot Users					
Robot User 1: Nestlé	Conducted in person	Sample frame	Semi-structured interview	32m	Audio recording
Robot User 2: Henn-na Hotel	Conducted in person	Sample frame	Semi-structured interview	50m	Audio recording
Robot User 3: Huis Ten Bosch	Conducted in person	Sample frame	Semi-structured interview	35m	Audio recording

Table A4.1 Interview Methods Table for High-Tech Japan Interviews

Interview Questions for Robot Users

1. How long have you been using robots?
2. In how many robots do you use?
3. Why did you start using robots?
4. Do robots replace the need for staff?
5. Do you think this usage is futuristic?
6. How has customer response to robots been so far?
7. What has the level of interest from the press been?
8. Has interest come mainly from domestic or international press?
9. Are you looking to increase your use of robots in the future?
10. Do you think this is the future of customer service-based jobs?
11. Do you think the Japanese are more receptive to robots?
12. Some have commented that these robots symbolise Japan's labour shortage. Do you agree?
13. Do you think that robots offer a solution for Japan's diminishing workforce?
14. Do you think this usage would be successful overseas?
15. Is there something uniquely Japanese about this use of robots?

Interview Questions for Robot Manufacturers

1. How does your robot compare to other robots already in production/past robots?
2. During development, what were important considerations? Was appearance important?
3. How has the level of interest from the press been?
4. Has interest come mainly from domestic or international press?
5. Are robots like yours the future of customer service-based jobs?
6. How do humans and robots compare in these kinds of roles? Are robots at a disadvantage?
7. Are there advantages to using robots over human staff?
8. Why are robots like yours necessary?
9. Do you work closely with companies using your robots?
10. Are your robots more popular in Japan or abroad?
11. Do you think the Japanese are more receptive to robots?
12. Is there something uniquely Japanese about this use of robots?

13. Some have commented that these robots symbolise Japan's labour shortage.
Do you agree?
14. Do you think that robots offer a solution for Japan's diminishing workforce?
15. Are we close to having a humanoid robot workforce in regular use in service and retail industries?
16. Are we close to having robots in the home?
17. Do you think that Japan is the robotics industry world leader?
18. Are the 2020 Olympics a factor of consideration for robot manufacturers?

Appendix 5: Questions for Interviews with Journalists and Foreign Editor

There were two sets of questions: a set of questions for journalists writing about Japan, and a set of questions for a foreign editor at a top British news publication.

Interview Questions for Journalists

1. How long have you been working as a Japan-based correspondent?
2. Were you interested in Japan before your engagement?
3. Are there any challenges in writing about Japan for an English-speaking audience?
4. Do you have to assume a complete lack of knowledge about Japan on the part of the reader?
5. Do you ever find yourself having to write about concept only those familiar with Japan would know about? Do you have any strategies for writing about these?
6. How do you choose what to write about? Is it something you choose?
7. Do you look to Japanese newspapers/news sources for potential stories?
8. How much of your reporting is influenced by your own interests in Japan?
9. How long do you usually have to produce an article?
10. What kind of research do you do for an article?
11. Do you find that being non-Japanese can make carrying out research or finding sources difficult?
12. Are there any other challenges you find in your job?
13. Do you think there is a tendency in Western writing about Japan to present it as weird?
14. Do you think that readers' interests have changed in your time as a correspondent?
15. Do you think that the British public have a good idea about Japan?
16. Do you use your work as an opportunity to educate people about Japan?

Interview Questions for Foreign Editor

1. The foreign news section of a newspaper or news site covers a vast number of countries. Is there an effort made to try to cover as many countries as possible?
2. Is it fair to say that some countries are more significant than others? And that these countries thus get more coverage?
3. Where does Japan rank?
4. What percentage of articles do not make it to being published? Has the shift to people primarily getting their news from the web meant that fewer articles do not get published as websites have no page limits?
5. In your role as a foreign editor, how do you deal with editing articles about countries you might not have specialist knowledge about? Do issues ever arise? If so, how do you deal with them?
6. Are there any other challenges in your job?
7. In your opinion, what is your most important function as foreign editor?
8. Journalists sometimes feel pressure from their editor, but what kind of pressures do editors face, and from whom?
9. Do you keep track of what kinds of stories are popular? Do you act on such metrics?
10. Are there particular kinds of stories (specific genres or topics) about Japan that are more likely to be published?
11. How important is it that audiences engage with an article?
12. Does the audience impact what articles get written?
13. Do you ask for specific articles to be written, or is it down to the journalist to find the story?
14. What kinds of things do you send articles back to the journalists for?
15. Who decides on the headline?
16. Many British headlines involve some kind of pun; do you think this lessens the value or undermines the potential seriousness of the rest of the article?
17. As well as coverage of breaking news/developing stories, feature articles are also common in the foreign news section. What is their purpose? And how important are they compared with current news articles?
18. Since many feature articles are not time sensitive, how is it decided when they should be used? Do such articles often get sat on for a period of time?

19. How much of foreign news coverage is done from the news desk, rather than from correspondents abroad?
20. What kinds of sources do news desk-based journalists use?

Appendix 6: Consent Form

Below is the research summary and consent form used to gain permission to conduct interviews with participants and use their responses in the research. This consent form was submitted as part of the requests for ethical approval for the two fieldwork trips.

(Mis)Reporting Japan: Technology and Japan in the British Press

A PhD Research Project

Please take time to read the below information carefully. Should anything be unclear, or you have any questions, please do not hesitate to contact me.

About my Research

My name is Christopher Hayes and I am a PhD student at Cardiff University, UK. For my PhD I am undertaking a study of news reporting on technology in Japan, and am particularly interested in the perceived notion of a unique relationship between technology and culture in Japan. More specifically, my research concerns the stereotyping of Japan in such news articles. As part of my study I have been looking at a particular story that has appeared in multiple news sources over the last few years: the story that Japan is still using fax machines heavily. While fax machines are certainly still around, my own research suggests that their use is nowhere near as common as these news articles would claim. Rather, it would seem that these stories are appealing to notion common among articles about Japan—that of ‘weird Japan’.

Purposes of the Research

Technology often features as a topic in news articles concerning Japan, regularly highlighting perceived futuristic aspects of the country. Recently, news sources have begun to discuss how in fact Japan is actually low-tech in comparison with

Europe and the United States. My thesis hypothesises that these views of Japan are underpinned by stereotypes and generalisations. This present research aims to collect observational data on actual technology use, as well as interview those connected with the technology.

Participation Details

Participants will be invited to take part in a short interview (either in person, over the telephone, or by email) on the use of technology in Japan, particularly with regard to robotics in Japan. Participants will be contacted in advance, at which time a full list of questions will be provided, as well as a copy of this consent form.

Privacy and Ethics

Participation in my study is entirely voluntary. You are free to decline to answer any questions, and can also withdraw from the study at any point. Anonymity is of the utmost importance and your name will only be used with your expressed, written consent. All notes and/or recordings taken during the course of an interview will be held for five years, and you will be free to obtain access to this whenever you like, in accordance with the UK Data Protection Act (1998). You can ask to have any data pertaining to you deleted at any time.

Consent Form

If you have any questions or concerns, please contact:

PhD Researcher: Christopher Hayes

Email: HayesCJ@cardiff.ac.uk

Consent and Signature

Please read the below information carefully, think about your decision, and if you agree please sign below.

I acknowledge that I was informed by Christopher Hayes of Cardiff University of the following research project, the way it will be conducted and the conditions of my participations in it.

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw.

I understand that my name will only be used if expressed, written consent is given, and otherwise the information provided by me will be held totally anonymously, so that it is impossible to trace this information back to me individually. I understand that, in accordance with the Data Protection Act, this information may be retained indefinitely.

I consent to participate in the study conducted by Christopher Hayes, Cardiff School of Modern Languages.

I give consent for my name to be used*: **Yes** **No**

I give consent for my company's name to be used*: **Yes** **No**

**Please circle your answer*

Name: _____

Signature: _____

Date: _____

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