

**CONTEXTUALISING INFORMATION BEHAVIOUR:
THE EXAMPLE OF LAOS**

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Abstract

The ways in which people need, seek, and use information vary considerably from one context to another. This thesis reports on a qualitative study investigating the contextual factors affecting information behaviour in a developing country. The literature review revealed that cultural and social factors have a significant impact on cognition and information behaviour, yet contextualised understandings of information behaviour that take diverse local conditions into account have yet to be developed for non-Western, developing country contexts. An interpretivist research design was employed in this study, using Dervin's sense-making methodology, the critical incident technique, and discourse analysis to collect, analyse and interpret interview data on everyday information behaviour from 30 participants in Laos.

The primary objective of the research was to identify the contextual factors that affect information behaviour in Laos, and to understand how contextual factors influence how people need, seek, manage and use information. The findings indicated that a number of interdependent primary and secondary contextual factors play a key role in how people engage with information in Laos. Primary factors included the social and cultural contexts of an individual, with numerous secondary factors such as personal, situational, physical, and economic contexts also playing a role in information behaviour. The interpretation of the findings enabled the development of a contextualised understanding of information behaviour for individuals in Laos. In addition, the research methods provided a framework from which contextualised understandings of information behaviour in diverse local contexts can be explored, fulfilling a secondary objective of the research. These findings have implications for information professionals, information systems design, and international aid projects, by providing contextualised understandings of information behaviour, facilitating the development of more relevant services and resources.

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List of abbreviations

CIT – Critical Incident Technique
 DA – Discourse Analysis
 DIR - Discursive Information Research
 HIB – Human Information Behaviour
 IB – Information Behaviour
 ICT – Information and Communication Technology
 IFLA – International Federation of Library Associations and Institutions
 IL – Information Literacy
 INSU – Information Needs Seeking and Use
 ISIC – Information Seeking In Context
 LIS – Library & Information Science
 OECD - Organisation for Economic Co-operation and Development
 (Lao) PDR – Lao People’s Democratic Republic
 QoL – Quality of Life
 SMM – Sense-making Methodology
 UNESCO – United Nations Educational Scientific and Cultural Organisation

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Chapter 1 **Introduction to the study**

The introduction to this study provides a description of the context of the problem statement, research questions, research objectives, as well as justification for and significance of the research.

An individual who interacts with information, whether seeking, using, organising, evaluating, or disseminating information, is engaging in human information behaviour. Most individuals will interact with information in one way or another on a daily basis throughout their lives, regardless of their nationality, age, race, or gender.

Despite its universality, information behaviour manifests itself in a variety of ways, and is often quite different from one context to another. The ways in which information behaviour is manifested in individuals can be described as “information practices”, and include how individuals respond to information needs, seek, use, and disseminate information. An individual’s everyday information behaviour may be quite different from his or her work-related information behaviour, and may vary significantly from those of his or her spouse, neighbour, or colleague. Several models have been developed to describe the processes and functions involved in human information behaviour, and much of the relevant theory has grown out of library and information science research.

The most widely applied models are Wilson’s “Model of Information Behaviour” (1999) and Kuhlthau’s “Information Search Process” (2005). These models share a developed-world, Western perspective in terms of their development and application. The empirical evidence that underlies existing information behaviour models has primarily been collected in Western, English-speaking contexts. While some of these models emphasise the information system with which the individual interacts, and others emphasise the information user, recently scholars such as Spink & Cole (Spink & Cole, 2001) and Julien & Michels (2004) have called for further emphasis on the context in which the information behaviour occurs.

Amongst the prevalent models of information behaviour, Dervin has written extensively on “Sense-making”, a multi-disciplinary approach to investigating how individuals use communication to make sense of their world (See Dervin 1976, 1992, 1999, and 2008). Dervin’s

investigations into human information behaviour and communication have resulted in a model of information behaviour and a methodology for examining communicative behaviour such as information seeking and use called "sense-making". Dervin's Sense-Making Methodology (SMM) explicitly recognises the context of the individual as influencing his or her sense-making behaviour, and for this reason, SMM has a great deal of potential as a tool for investigating the contextual factors influencing information behaviour. Thus far, the applications of SMM in non-Western societies have been limited, though SMM was designed to be used in any context. For this reason, SMM has greatly influenced the development of this research.

While these models and ways of conceptualising human information behaviour have proved relevant in many Western contexts, the contextual nature of human information behaviour has yet to be fully explored, particularly within developing countries and amongst non-Western societies. Talja, Keso & Pietiläinen (1999) stated that information behaviour may be understood and explained as "phenomena mediated by social and cultural meanings and values" (p. 761). Cox (2012) also suggests that "all social practices involve information use, creation and seeking" (p. 185). Though social and cultural meanings and values differ considerably from one context to another, the influence of these factors on everyday information behaviour has not specifically been explored in a non-Western context thus far.

Research by Chatman (1996, 1999, 2000) supports the theory that everyday information behaviour is socially and culturally determined. Chatman (2000) suggested

Human information behaviour is a construct in which to approach everyday reality and its effect on actions to gain or avoid the possession of information. The choice to decide the appropriate course of action is driven by what members' beliefs are necessary to support a normative way of life (p. 14).

According to Chatman (2000), "normative behaviour" is dictated by the mores and norms of the community to which one belongs. Chatman explored how these socially mandated values determine the manner in which an individual interacts with information in marginalised communities in North America. Her findings resulted in the "Information Poverty" theory of information behaviour, which provided an additional framework used in this research to explore the contextual factors affecting information behaviour.

Research in cognitive psychology, education, and sociology also supports the theory that individual cognitive processes are contextually variable, and predominantly socially determined (See Bates, 1990; Peters, 2007). These contextually variable cognitive processes include the ways in which an individual interacts with information, yet thus far little research has investigated the contextual nature of information behaviour, or the development of a process for contextualising human information behaviour models.

Consequently, there is a lack of understanding of the iterative and interdependent nature of an individual's context and his or her basic human needs, which are often resolved through information behaviour. As needs are resolved, new needs arise in a continuous cycle, due to the dynamic nature of everyday life. Many different factors play a role in determining the nature of this cycle: the individual's perception of his or her needs, the individual's articulation of his or her needs, the methods the individual will use to resolve his or her needs, and to what extent the resolution of the need will, in turn, permit the individual to address other needs (see Figure 1). As more basic needs are met, such as food and shelter, the individual's context is altered, and his or her basic needs evolve, representing a dynamic cycle of needs.

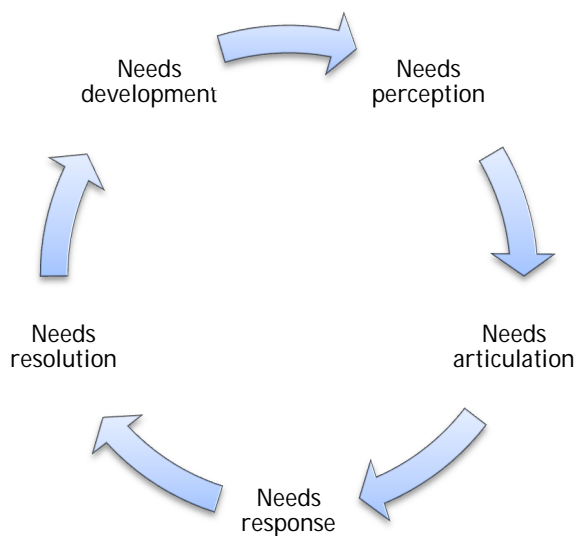


Figure 1 – A dynamic cycle of needs

Underpinning this continuous cycle of basic needs and everyday information behaviour lies the deeper cognitive environment of the individual. This deeper cognitive environment is embedded within the individual's context, influenced by a myriad of factors, including the unique social, cultural, economic, political, and physical environments, as well as the individual's experiences, personal values, and role. The resolution of these needs may be impeded or facilitated by unique enablers and barriers present throughout the cycle, in every information situation. This research aims to explore those contextual factors affecting the continuous cycle of needs in everyday information behaviour

1.1. Definitions of key terms

Definitions of certain key terms and concepts are provided so that readers share a common understanding of the meanings as used in this research. Listed below in Table 1 are the definitions of key terms used in this research. Unless otherwise cited, these definitions are based on those provided in the *Oxford English Dictionary Online* (Oxford University Press, 2010).

Table 1 - Key terms and definitions

Term	Understanding used in this research
Cognition	The mental processes, both physiological and psychological, involved in making sense of the world around us, acquiring understanding, communicating with others, through thought, experience, and the senses.
Context	The totality of circumstances that form the setting for an event, statement, or idea, and through which understanding is constructed.
Culture	A set of shared values, customs, and traditions, ways of behaving and expectations that is common to a group of individuals. Culture may also include shared language, history, religion, or geographic location.
Ethnography	A research method in which a social group is observed and studied, with emphasis on the culture of the social group (Bryman, 2008 p. 402).
Human Need	A requirement necessary for functioning, from most basic, to most advanced, and may be physiological, affective, or cognitive.
Information	One level of understanding on a continuum of human interaction with the universe. Raw facts, or data, become information once they are perceived by an individual. This information may then go on to become knowledge, and finally, wisdom.
Information behaviour	"How people need, seek, manage, give and use information in different contexts" (Pettigrew, Fidel, & Bruce, 2001).
Information literacy	An individual's level of competency in information related skills, in which higher competency is desirable.

	Individuals' levels of competency may range from information illiterate to highly information literate. (Horton, 2008).
Information need	An individual's need for information to solve a particular problem or satisfy a more basic physiological, affective, or cognitive need (Wilson 2000). Information needs have also been described as a response to a gap in an individual's knowledge base (Dervin, 1998).
Information practices	The individual manifestations of information behaviour, in which an individual interacts with information (Savolainen, 2007).
Information seeking	The act of seeking information, which may be active or passive (incidental) (Wilson, 2000).
Reasoning	The human mind's ability to think, understand, make sense of the world, make decisions, and solve problems and form judgements using logic.
Society	A group of individuals who share a common community, which generally includes shared culture, language, region, or history.

1.2. Problem statement

Information behaviour is contextually variable, yet existing theories and models tend to generalise human information behaviour from a Western, developed-world, perspective. These models, including those developed by Wilson (1999), Kuhlthau (2005), and Dervin (1998) mentioned earlier, place emphasis on the individual information user and do not fully develop the concept of contextual variation, such as diverse social and cultural norms and values. While certain models do provide explicit consideration for context, such as Wilson's "Model of information behaviour" (1999), the potential influence of contextual variation, in particular upon the model or information behaviour processes themselves, remains unexamined.

Several motives provide an impetus for the development of contextualised understandings of information behaviour. International organisations, such as the International Federation of Library Associations and Institutions (IFLA) and the United Nations Educational, Scientific and Cultural Organization (UNESCO), often rely upon existing information behaviour models in the design of information literacy education development projects for implementation in developing countries. However, thus far, little evidence has been documented to support the efficacy of the aforementioned information literacy projects in the developing world, despite substantial financial resources being dedicated to such projects. Potential improvement to these types of development projects provides one incentive for the development of contextualised understandings of information behaviour.

Secondly, the design of information retrieval systems and various information system interfaces are often based upon Western ways of conceptualising information behaviour. An understanding of the contextual factors influencing information needs, seeking, and use (INSU), may facilitate the design of more relevant and usable information system interfaces for non-Western contexts.

Thirdly, information professionals in developing countries such as Laos are predominantly educated abroad, in Western educational institutions. The development of contextualised information behaviour models may enable individuals to better address the needs of the members of their communities. A contextually relevant information behaviour model will enable the design of more appropriate and valuable information services, libraries, and educational programs, better suited to meeting the needs of the community.

Finally, contextualised understandings of information behaviour may enable individuals in diverse contexts to develop more effective information practices. For many people, more effective information practices would facilitate the successful resolution of information needs. Increased ability to resolve basic information needs will enable individuals to address more complex needs, impacting the quality of life experienced by individuals throughout the world. However, thus far, the relationship between information behaviour and quality of life remains unclear. Notwithstanding this lack of understanding, all of the above examples provide evidence of potential incentives for developing contextualised models of information behaviour.

The problem, therefore, is that we do not understand how contextual factors influence information behaviour in developing countries or amongst non-Western societies.

1.3. Research objectives

The primary objective of the research was to articulate the influence of contextual factors on the everyday information behaviour of individuals in a developing country. The research focuses on a specific developing country and a specific community, individuals in and around Vientiane, Laos. Laos is a country located in the greater Mekong sub-region, in Southeast Asia. The context of Laos is expanded upon in section 2.5.

This research aimed to address a perceived gap in existing library & information science research. Spink & Cole (2001) suggested that a deeper understanding of everyday information behaviour from diverse cultural and social perspectives would provide a foundation for “the development of generalizable process models [of information behaviour] that hold across situations” (p. 304).

My research, however, was undertaken with an awareness that it may not be feasible to develop “generalizable process models [of information behaviour] that hold across situations” due to the vast contextual differences between situations. Instead, a more appropriate objective was the creation of a generalizable procedure for developing contextualised models of information behaviour. A procedure such as this will enable the development of contextualised understandings of information behaviour to suit a variety of local conditions.

Consequently, the secondary objective of the research was to design a generalizable procedure that will enable researchers to develop contextualised information behaviour models to suit local conditions in diverse contexts. This objective was an outcome derived from the research methods.

Through the investigation of the contextual factors influencing information behaviour in Laos, the primary objective was addressed, namely the development of a contextualised understanding of information behaviour as evidenced by the case of everyday information behaviour of individuals in Laos. While certain elements of this contextualised understanding

may hold true across diverse situations, it was the research methods leading to the contextualised model that provided a basis from which to address the secondary objective: the design of a generalizable procedure for contextualising information behaviour that can be applied in diverse contexts.

1.4. Research questions

Investigation into the problem statement and objectives led to the developing of the following two research questions:

- 1. What are the contextual factors that influence everyday information behaviour of individuals in Laos?**
- 2. How do these factors influence the everyday information behaviour of individuals in Laos?**

Additional operational questions have arisen during the development of this research and are discussed in chapter 3.

1.5. Significance of the research

By examining the case of individuals in Laos we can begin to develop an understanding of how these factors influence information behaviour that may also resonate with conditions in other developing countries. In articulating the relationship between contextual factors and everyday life information behaviour of individuals in Laos, a generalisable procedure for developing a contextualised understanding information behaviour was designed and tested. While the nature of the relationship between contextual factors and information behaviour is unique for every context, the procedure for developing a contextualised understanding of information behaviour may be duplicated in diverse contexts. The ability to contextualise models of information behaviour, and in turn, address the issues mentioned in section 1.1, has significance for information science researchers, international organisations, information professionals in non-Western contexts, and potentially individuals in developing countries throughout the world.

1.6. Justification of the research

The incentives for a contextualised model of information behaviour are described in section 1.1. A discussion of the nature of context and its role in human information behaviour has remained a small but important part of the information science literature since the mid-1990's. The majority of the discussion is devoted to particular components of information behaviour, as evidenced by the establishment of a conference entitled "Information Seeking in Context" in 1996, yet "context as a concept appears in the research literature as largely amorphous and elusive" according to Courtright (2007, p. 277). Moreover, research has yet to specifically investigate the relationship between everyday information behaviour, the cultural and social dimensions of context, and quality of life. Several scholars within the information science discipline have noted this gap in knowledge, and suggested further investigation into this area. Authors such as Spink & Cole (2001, p. 304), Komlodi (2005, p. 112), Steinwachs (1999, p. 194), Courtright (2007, p. 291), and Erdelez (1999) and their recognition of this gap in knowledge are discussed in greater detail in the literature review.

I elected to undertake this research in the context of Laos for several reasons. From 2008-2009 I worked as a technical advisor in information literacy to the National University of Laos's Central Library. The position was an unpaid voluntary one, coordinated by Dr. Gary Gorman and Dr. Dan Dorner under the auspices of their IFLA project aimed at strengthening information literacy in the Greater-Mekong Subregion. During the year I spent working with the librarians and staff of the National University, I developed a deep appreciation for Lao people and Lao culture. My integration into Lao society was facilitated by my previous training and experience living in a non-Western society. As a Peace Corps volunteer in Benin, West Africa (2003-2005) I underwent extensive cross-cultural training, aimed at facilitating development through instilling in Peace Corps volunteers a cultural sensitivity and awareness that is fundamental to effective collaboration amongst people of different cultures. The teachings and values I acquired during my Peace Corps services helped me to develop a holistic approach to cultural integration in my host community, and also helped me to successfully integrate with my Lao community.

It was during my time as a Peace Corps Volunteer in West Africa that I began to think about issues related to critical thinking, information literacy, and development. Initially, I considered

critical thinking to be a fundamental skill, and the lack thereof to be a hindrance to development. It was only when I began undertaking this research project that I began to gain insight into the cultural context from which the concept of critical thinking arose, and realised critical thinking was not a universally relevant concept nor was it intuitive to many people from non-Western cultural backgrounds. The cultural context of critical thinking is further described in section 2.2.1.

After completing my project with the National University of Laos, and embarking on further study, I was reminded of my interest in critical thinking, information literacy, and their relationship to development and quality of life in developing countries. The lack of investigation into information literacy outcomes in non-Western contexts led me to consider the broader field of information behaviour and contextual factors. Laos seemed ideal for investigation into the contextual factors affecting information behaviour. Not only did I already have a thorough understanding of the culture and language, and contacts willing to facilitate participant recruitment, but I became aware that culturally and socially, Laos represented an ideal society to investigate. Laos is currently one of the fastest growing economies in Southeast Asia. However, due to its one-party communist government it has been largely closed to Western cultural influence until very recently. Thus, Lao society has retained a vibrant and unique culture that is evident in nearly all aspects of Lao everyday life. In addition, as mentioned previously, I realised that the example of individuals in Laos may resonate with individuals in other developing countries, as well as other countries in Southeast Asia, due to similarities in linguistic and cultural backgrounds.

I also observed that individuals within the Lao population possess qualities that make them well suited to investigation. Their roles as members of a culturally unique group with potentially distinct information behaviour would provide rich data from which it might be possible to draw generalisable conclusions regarding everyday information behaviour. Further reasoning behind the selection of Laos and the selection of research participants is described in section 3.3.1.4.

Approaching this research as an individual from a Western cultural background attempting to understand the cultural and social factors affecting the information behaviour of individuals from a different culture was not without challenges. These challenges are discussed in greater

detail in section 8.4, along with strategies I undertook with the aim of minimising cultural bias in this research. By frequently asking questions suggested by Langhout (2006) related to my identity and role in the research as well as the role of my participants, I strived to maintain an awareness of my own cultural values and how they could affect the research. This approach provided a solid foundation from which I was able to successfully address the research objectives identified in section 1.3

1.7. Organisation of the thesis

The first chapter of this thesis has introduced the problem, and presented some background on the research. The second chapter provides a discussion and analysis of relevant scholarly literature in three principle areas: context, cognition, and information behaviour research. The salient points of the relevant theoretical and applied research are summarised, and the implications of the existing literature on my research are explored. The context of Laos and Dervin's SMM are introduced in the second chapter.

The third chapter includes a description of the research methodology and research methods that I employed. The social constructionist orientation, which has influenced the selection of a relativistic ontology and interpretive epistemology, is described in detail, and further elaborated upon from a theoretical perspective. In the third chapter the qualitative methodology is demonstrated to be suitable for exploring how and why context influences information behaviour. The third chapter introduces the theoretical framework of sense-making and describes how the research makes use of Dervin's SMM to investigate information behaviour. The choice of methodology is further substantiated with examples from the literature in the third chapter.

The research design and supporting arguments are also presented in the third chapter. The suitability of the research design is demonstrated through reference to existing theory and comparable research. Support for the use of SMM tools and the critical incident technique to gather data regarding information behaviour and identify embedded contextual factors is also provided. A description of the discourse analysis technique, as well as support for its use in information behaviour research, is presented.

A three-phase analytic method involving SMM and discourse analysis was selected for understanding the data. A detailed description of the data analysis procedures are also provided in chapter 3.

Chapters 4 and 5 present the data analysis. Chapter 4 reports on the findings of the first and second phases of analysis, in which the sense-making metaphor and discourse analysis are used to identify information behaviours in Laos, and the contextual factors that influenced them. Chapter 5 reports on the findings of the third phase of analysis, which examined the data for evidence of the relationship between these contextual factors and information behaviour, again using a synthesis of the sense-making metaphor and discourse analytic techniques.

These findings are discussed with relevance to existing theory and literature in Chapter 6. The findings are presented so as to address the research questions identified in section 1.4. A contextualised understanding of information behaviour in Laos is provided and the overarching features of information behaviour in Laos are presented and discussed. In addition, the applicability of the research methods in providing a reproducible method for contextualising understandings of information behaviour in diverse local conditions is explored, addressing the secondary objective of the research.

The seventh and final chapter explores the implications, future directions, and conclusions of the research. Potential issues of concern, and the limitations and delimitations of the research are presented in chapter seven, in tandem with strategies I used for minimising the impact of such issues or limitations. Chapter 7 also addresses the topic of research quality, and strategies that I employed to this research met the criteria for high quality research are presented. Finally, the entire thesis is summarised and I provide some concluding remarks.

The main body of the thesis is followed by a complete reference list, and supporting appendices.

Chapter 2 **Literature review**

2.1. Introduction

In this chapter I explore and analyse the scholarly literature relevant to the research problem statement and research questions, taking a multi-disciplinary approach to gaining an understanding of human information behaviour and context. With this objective, several scholarly disciplines were broadly surveyed, and a smaller number selected for a deeper investigation based on initial relevance. The majority of relevant research was found in the social sciences, including library and information science, education, sociology, anthropology, development studies, philosophy, as well as psychology. The literature review is divided into two main topic areas, and their sub-components, illustrated in Table 2.

Table 2 - Literature review structure

Main topic	1. Information behaviour	2. Context
Sub-components	<ul style="list-style-type: none">● Human cognition, cognitive pluralism, and critical thinking● Information behaviour models● Information needs, seeking & use (INSU)	<ul style="list-style-type: none">● Contextual factors<ul style="list-style-type: none">○ Culture○ Society● Context in information behaviour research

The exploration and analysis of relevant literature was an iterative and holistic process. Many of the concepts described in this literature review relate to concepts explored in later chapters, and concepts explored in chapters three onwards relate to literature explored in Chapter 2.

2.2. Information behaviour

This section explores concepts related to human information behaviour, and how information behaviour has been investigated throughout the literature.

Information behaviour research aims to understand the nature of information, and how individuals interact with information. My research uses Pettigrew et al.'s definition of

information behaviour; “how people need, seek, manage, give and use information in different contexts” (2001, p. 44).

This definition takes into account the multitude of ways in which an individual may interact with information, and does not simply encompass observable action, but also how information flows within a given context. Essentially, interaction with information can be reduced to a series of sensorimotor skills and, more importantly for the purposes of the current study, cognitive processes. For this reason, an understanding of basic human cognition and the cognitive processes involved in information behaviour are required to fully understand how contextual factors affect information behaviour. These cognitive processes include a broad range of mental activities, such as perception, learning, remembering, thinking, interpreting, evaluating, reasoning, and decision-making. These cognitive processes are examined together with contextual variation in the following section.

2.2.1. Cognition

This section explores concepts related to human cognition, and how cognitive processes are contextually variable. The dimensions of cognition described below are explored with consideration for the contextual aspects influencing them, from the perspective of an information science researcher, informed by the literature consulted over the course of this research.

2.2.1.1. The case for cognitive pluralism

According to *the Oxford Dictionary of Philosophy* (Blackburn, 2005), “cognitive pluralism” is “the view that different people, or groups of people, may have different cognitive architectures, therefore being disposed to reason differently or form and revise beliefs and desires differently” (n.p.). The case for cognitive pluralism has been convincingly argued by numerous scholars, described below.

According to Bates and Plog (1990) differences in cognitive patterns actually account for the variations in behaviour exhibited between different cultures. Bates suggested that “if societies differ culturally, it is possible that they foster different cognitive processes – different ways of

perceiving and ordering the world" (1990, p. 254). Other scholars, such as Peters (2007), concur, suggesting that cognition and psychological phenomena, such as thinking and reasoning, should be treated as features of discourse, and thus as a public and social activity. My research addresses the case for the social construction of thinking rather than an individualist cognitivist construction, acknowledging that both cognition and human behaviour are the result of the interaction between biological influences and social and cultural factors (Bates, 1990; Peters, 2007). According to Cloak (1975) individuals all carry within them both a set of biological instructions and a set of cultural instructions. Bates and Plog (1990, p. 253) conclude "at this point, it is extremely difficult to determine the precise effect of each". Neither the cultural or social dimensions, nor the biological or physiological dimensions alone are entirely responsible for human cognition or behaviour, but rather an intricate combination of the two results in the varied and diverse nature of human behaviour and thought found throughout the world.

Despite the substantial evidence for cognitive pluralism, the idea that people from different cultures may reason differently appears to be commonly ignored. This is evident in educational institutions throughout the developing world, who often adhere to Western educational paradigms, despite being Non-Western societies. This idea is discussed further in the following sections.

2.2.1.2. Cognitive dimensions and educational objectives

The majority of Western educational curricula and ways of conceptualising information use and knowledge transmission are based upon a cognitive framework articulated and popularized by Benjamin Bloom's "Taxonomy of Educational Objectives" (Bloom, 1956). According to Whiteley (2006), "Bloom's taxonomy of educational objectives (cognitive domain) has guided the pedagogical process for almost half a century" (p. 66) in America. Benjamin Bloom, in collaboration with other educationalists, identified certain dimensions within the cognitive domain, generally separated into "lower-order" and "higher-order" objectives (Anderson, Krathwohl, & Bloom, 2001). Bloom (Anderson et al., 2001) believed successful education would permit learners to attain "higher-order" objectives. It is unclear as to whether the dichotomy between "lower-order" and "higher-order" thinking skills applies in non-Western contexts, as

some scholars suggest that non-Western learning patterns vary significantly from Western style (see section 2.2.1.4). However, the distinction between these objectives may be important regardless of the context.

Figure 2 below identifies the six categories in Bloom's taxonomy, beginning with the lowest, and proceeding to the highest order objective.

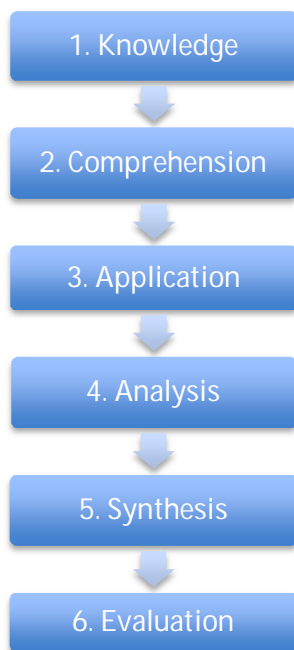


Figure 2 - Bloom's cognitive processes (after Anderson et al., 2001)

According to Dorner and Gorman (2006) learning and educational outcomes are achieved in Bloom's model or processes through a series of linked steps. Individuals move from "knowing (knowledge of specifics), to understanding (interpreting, extrapolating), to applying, to analysing (elements, relationships), to synthesizing (producing a communication or plan), and, finally, to evaluation (judging the results)" (Dorner & Gorman, 2006, p. 284). These cognitive skills are directly embedded in the individual's context, as well as being influenced by other factors. Therefore, it is difficult to generalise cognitive skills within a diverse world, where factors such as cultural and social practices influence cognition. It is important to note that the above taxonomy of learning objectives was developed by an American educator who approached the mapping of cognitive abilities from a distinctly Western tradition.

Scholars such as Dorner and Gorman (2006) have critiqued Bloom’s taxonomy as being culturally biased, or culturally inappropriate in non-Western contexts. It is true that little mention of the social and cultural construction of knowledge is made in Bloom’s framework. Other scholars, such as Luke and Kapitzke (1999) present similar critiques of the taxonomy, agreeing that learners do not exist in an intellectual or cultural void, nor do they all universally learn in the same logical and linear manner as identified by Bloom. The taxonomy, steps 4-6 in particular (Figure 2) also makes the assumption that all learners are suitably reflective and individualistic in their learning; however a great deal of research suggests the contrary (Geert Hofstede & Gert Hofstede, 2005; Nisbett, 2003; Steinwachs, 1999). However, Luke and Kapitzke (1999) recognised the fact that this linear model was indeed being revised in favour of more holistic modes of inquiry, being developed by students, researchers, teachers and librarians from diverse backgrounds and contexts.

Despite criticism that Bloom’s taxonomy is not normative worldwide, it does have parallels in information literacy competencies, which are implemented in diverse contexts. The commonalities evident in these concepts are summarized in Table 3. The concept of information literacy is described in greater detail in section 2.2.7.

Table 3 - Bloom’s concepts and information literacy concepts

Bloom’s concept	Related information literacy concept
Know	Identify information need
Understand	Access information
Apply	Organise information
Analyse	Construct new understanding
Synthesize	Apply new understanding
Evaluate	Communicate and reflect on the end product

2.2.1.3. Cultural influences on cognition

One key work in the field of culture and cognition is Nisbett’s (2003), *The Geography of thought: How Asians and Westerners think differently* which has garnered a great deal of both criticism and consensus. Nisbett asserted that Western culture is the result of centuries of tradition and

history, predominantly European in origin, with its roots in Ancient Greek ideologies, emphasizing autonomy and discourse (Nisbett, 2003). However, according to Nisbett, Asian culture originated from very different circumstances. While logical, linear arguments and critical theory prevailed in Europe, circular reasoning and analogy provided evidence of effective reasoning in Asia, and continue to do so (Nisbett, 2003). For the majority of the historical record, these two cultures had little or no interaction, and therefore developed distinctly different styles of thinking and reasoning. This is just one example of two extensive, complex, and ideologically quite different historical contexts that have resulted in diverse contemporary norms for cognitive processes. If one examined the historical and ideological contexts of other cultures, further differences in thinking and reasoning would most likely emerge.

Chan and Yan (2007) however, suggested a serious critique of Nisbett's (2003) hypothesis. The authors argue that "some of the differences alleged by Nisbett are either not real or exaggerated, and that his geography of thought fails to provide an adequate account of thinking styles across cultures" (Chan & Yan, 2007, p. 383). Chan and Yan saw Nisbett's model of thinking and reasoning as follows:

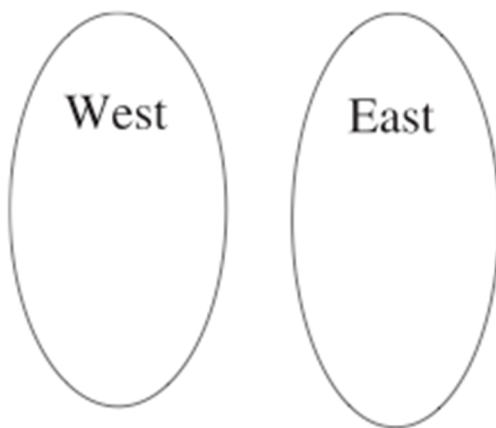
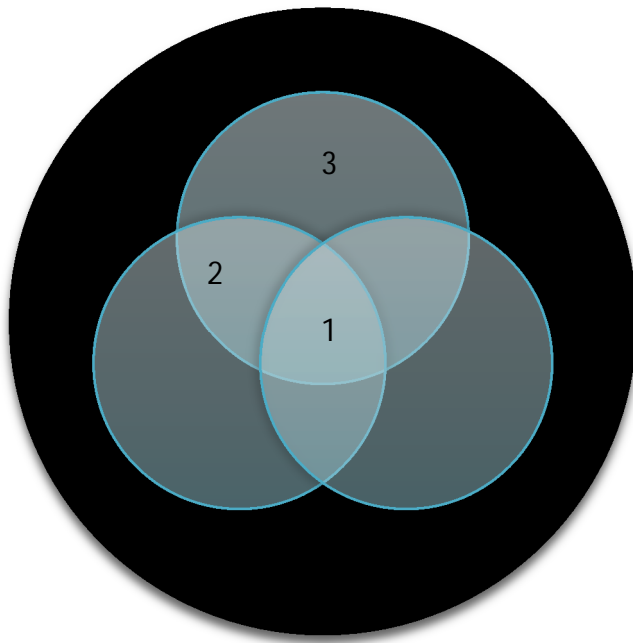


Figure 3 - The geography of thought according to Nisbett (Chan & Yan, 2007, p. 390)

In response, they developed the following model:



- 1.) Universal reasoning patterns
- 2.) Patterns shared by some, but not all cultures.
- 3.) Patterns unique to a single culture.

Figure 4 - Global reasoning patterns, adapted from Chan and Yan (2007 p. 391).

Figure 4 is perhaps a more accurate depiction of the pluralistic nature of cognition. Rather than a simple black and white dichotomy of East versus West, there are multiple separate or discrete styles of thinking, some of which have elements that resonate universally, others which may resonate in other contexts but not every context, and some that are thoroughly unique. The current study has predominantly been developed based on a conceptualisation of reasoning as illustrated by Chan and Yan.

2.2.1.4. Critical thinking in context

International development agencies working in developing countries such as Laos develop programmes based on general Western conceptualisations of learning objectives and evidence of effective learning, such as the ability to critically assess information. See the United Nations Economic and Social Council (n.d.) *Training the trainers in information literacy* for an example of a training programme conducted in Malaysia based on Western conceptualisations of information behaviour. A growing body of research suggests that critical thinking is not normative worldwide.

More than a dozen articles were published between 1997 and 2007 describing the difficulties many international students face when studying in tertiary educational institutions abroad, in countries such as New Zealand and Australia (Cadman, 2000; Chalmers & Volet, 1997; Green, 2007; Jones, 2005; Kutieleh & Egege, 2004; Nguyen, Terlouw, & Pilot, 2005; Ryan & Louie, 2007). Evers (2007) also asserts that “there are multiple, divergent standards of good reasoning” (p. 365). A central concept to Bloom’s taxonomy is the desirability of “meaningful learning”, as opposed to “rote learning” (Anderson et al., 2001). Bloom’s taxonomy asserts that meaningful learning or understanding can only occur through critical thinking skills, a view that does not provide a universal model of cognition.

Table 4 summarises key arguments suggesting critical thinking is not normative worldwide:

Table 4 - Critical thinking as a Western construct – scholarly evidence

Authors	Key points
Evers (2007)	<p>Cognitive pluralism (p. 365)</p> <p>Multiple, divergent standards of good reasoning (p. 365)</p> <p>Thinking styles across cultures (p. 383)</p>
Chan and Yan (2007)	<p>Domain-specific strategies common to daily lives (p. 389)</p> <p>Natural and social environments of each cultural community will also have distinct features, so people in each community may also have unique strategies (p. 390)</p> <p>Adaptive character of human reasoning (p. 400)</p> <p>Many non-logical patterns of reasoning are adaptive strategies, errors occur when they are applied beyond the ranges of their applicability. (p 400)</p> <p>A good thinker is a person who makes appropriate judgments in particular circumstances (p. 400)</p> <p>Logic or reasoning (or critical thinking) is not something homogeneous: there are different ways or forms of reasoning, adaptive strategies in response to particular problems in human life. (p. 400)</p> <p>Natural and cultural contexts in which their thinking patterns are embedded (p. 400)</p>
Peters (2007)	<p>Kinds of thinking (p. 351)</p> <p>Styles of reasoning (p. 351)</p> <p>Diversity of notions of thinking (p. 354)</p> <p>Bourdieu (p. 357)</p>
Mason (2007)	<p>Autonomous</p> <p>Communitarian</p> <p>Differing historical and cultural perspectives (p. 1)</p> <p>Critical attitude or disposition ...intrinsic to character (p. 2)</p>

The evidence for the historical and cultural context in which many educational paradigms were established are not always acknowledged. One of most overarching accounts of critical thinking and its cultural inheritance is Peters' (2007) study; asserting that the critical thinking research

paradigm has tended to treat thinking ahistorically, focusing on universal processes of logic and reasoning. While processes such as logic and reasoning are universal according to cognitive psychologists, the ways in which they are manifested are not (Nisbett, 2003).

Critical thinking is one manifestation of what counts as “good reasoning” in certain cultures (Nisbett, 2003). Other cultures count different behaviour as evidence (Nisbett, 2003). Despite the abundance of research suggesting that thinking is a culturally embedded practice, a lack of cultural sensitivity could be described as normative in the curricula of many educational institutions, where critical thinking is often viewed as the sole method through which effective reasoning can be evidenced. The prevalence of this paradigm is a result of the historical dominance of certain teaching and learning styles in Europe, North America, Australia and New Zealand and lack of awareness of cognitive pluralism, or the existence of different styles of thinking and reasoning. Examples of the foundations accounting for variation within these teaching and learning styles are given by Egege and Kutieleh (2004, p. 80), and Hall (Hall, 1976). Hall (1976, p. 8) was one of the first to recognise the existence of cognitive pluralism. Hall (1976) argues that:

[T]he natural act of thinking is greatly modified by culture. Western man uses only a small fraction of his mental capabilities; there are many different and legitimate ways of thinking; we in the West value one of these ways above all others – the one we call ‘logic’, a linear system that has been with us since Socrates. Western man sees his system of logic and synonymous with the truth. For him it is the only road to reality. (p. 8)

Kutieleh and Egege (2004) suggested that it was out of the Greek tradition of competitive discourse and dialogue using argumentation skills that contemporary education practices developed. The authors provided evidence for the historical dominance of critical thinking, suggesting it grew from the Greek emphasis on providing proof or justification using analysis and linear logic, citing Lloyd (1996) as additional evidence. An individual would gain status through the use of critical analysis to destroy an opponent’s argument, and by constructing a convincing argument of the individual’s own point of view (Egege & Kutieleh, 2004). Egege and Kutieleh viewed this method as strongly contrasting classical Chinese tradition, a model that relies heavily on analogy and circular reasoning. These historical foundations for contextually variable teaching and learning account for cognitive pluralism and the lack of a universally

effective pedagogy, particularly with regard to attempts to integrate critical thinking into pedagogy in non-Western cultures. Egege and Kutieleh specifically said “we felt it important to acknowledge that critical thinking, as we know it in the West, is not universal. It arises from a very specific set of historical, political and social conditions” (2004, p. 80).

Educational research supports the belief that what individuals perceive as evidence of good reasoning is socially embedded. Therefore, attempts to describe cognitive practices must be contextualised in order to be relevant in diverse contexts, as a universal model of cognitive practices is not currently conceptually feasible. The implicit role of culture and socialisation in an individual’s cognitive development must play a key role in any attempt to study, describe, or categorise human thought and learning. An emerging paradigm in social constructionism suggests that learning does not occur within learners and that “teaching does not emanate from teachers, but rather is a sociocultural construction produced by a group and stored as a cultural product of the group” (Mayer, 2009, n.p.). This viewpoint provides further evidence that cognition (and therefore information behaviour) is also a cultural and social product.

The idea that knowledge and cognition are socially constructed is described by Berger and Luckmann in their book *The social construction of reality* (1966). The ideas of Berger and Luckmann, as well as additional support for the use of the social constructionist research perspective, are further presented in section 3.1.2.

2.2.2. Components of information behaviour

A good understanding of the three primary components of information behaviour is required in order to fully understand the various theories and models of information behaviour that have developed. These three primary components are:

- Information needs
- Information seeking
- Information use

These components of information behaviour and relevant literature are described in the three following sections.

2.2.2.1. Information needs

Information needs represent an important dimension of human information behaviour. An individual may choose to engage in information behaviour in response to the perception of an information need. How these needs arise, are responded to, and resolved, deserve consideration as they are often the impetus for engaging in active information behaviour. An understanding of how individuals perceive their information needs, and how this perception may influence the decision to engage in information behaviour gives insight into how individuals choose to respond (or not respond) to information needs. The following section examines the relevant scholarly literature and theories of information needs.

Basic needs

According to Case (2012), "information needs do not arise in a vacuum, but rather owe their existence to some history, purpose, and influence" (p. 226). An individual seeks information that will respond to an information need partially determined, constrained, and supported by his or her contextual environment (Case, 2012). These factors may be external, internal, tangible, or intangible. The daily behaviours in which an individual engages, as well as one's basic needs, are dictated not only by his or her context, but also by his or her individual role in the community. This could be a personal, professional, or group member role, as identified by the individual. An individual's basic human needs are established as a function of their role, embedded like a Russian *matryoshka* doll within their cognitive horizon, and ultimately, their lifeworld and context. Wilson (2006, p. 661) suggested that "[basic] needs arise out of the roles an individual fills in social life". Needs may also arise out of societal and cultural expectations. It is within an individual's role that his or her basic needs are established, and as a response to these needs, that information seeking behaviour to satisfy the needs will occur. Therefore, "information needs" do not exist per se, but rather information seeking is a behaviour as a result of a basic human need, e.g. hunger (Belkin & Vickery, 1985; Wilson, 2006).

American psychologist Abraham Maslow proposed a hierarchy of human needs, beginning with the most basic needs (physiological: food, air, sleep) which must first be met before more complex needs can be addressed, the pinnacle of which is self-actualization. Figure 5 below illustrates this hierarchy of needs.

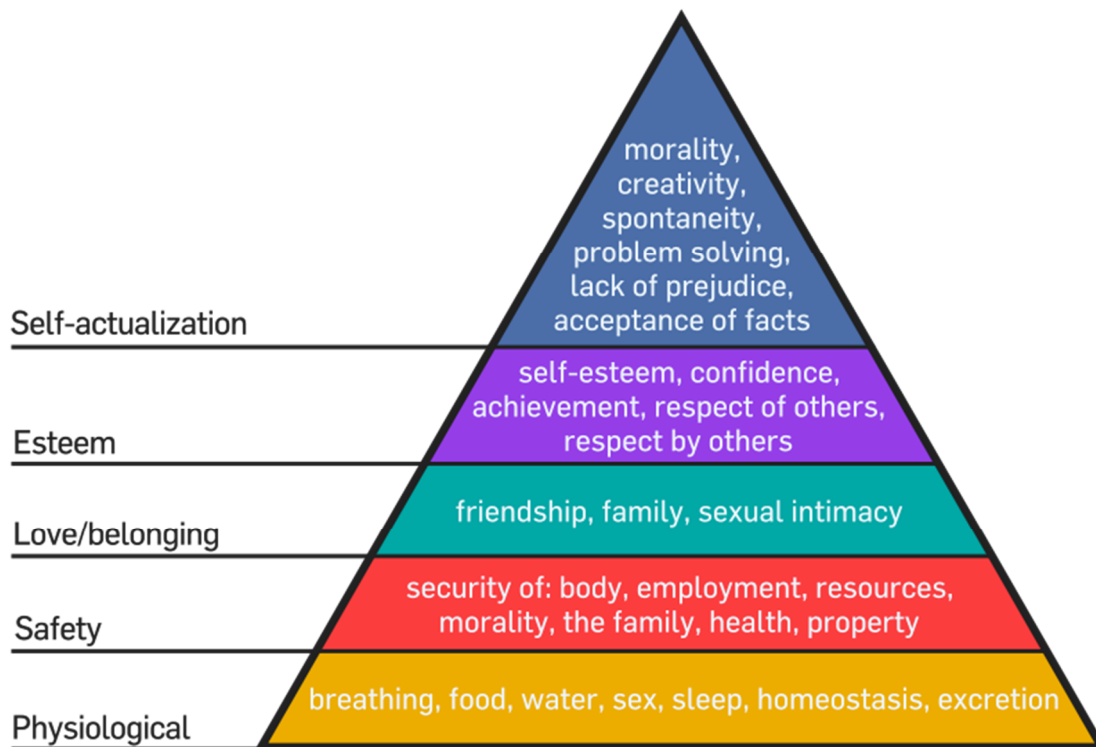


Figure 5 - Maslow's hierarchy of needs ("Maslow's Hierarchy of Needs," 2009, n.p.)

The argument that Maslow's hierarchy of needs may also have inherent cultural bias hasn't received extensive acknowledgement in most mainstream research. Steinwachs (1999) remarked that the hierarchy was developed "based on a situation in a country which, according to Geert Hofstede's research, shows the highest index for individualism in the world" (1999, p. 197). It is therefore difficult to view the highest-ranking placement of "self-actualization" as objective, as this might not be the pinnacle of human needs in communities who value collectivism over individualism.

Basic needs as a trigger for information seeking behaviour

Wilson (2006) suggests that there are three basic human needs, which can trigger information-seeking behaviour with the aim of satisfying these needs. These basic human needs are:

- (1) Physiological needs, such as the need for food, water, shelter, etc.
- (2) Affective needs such as the need for attainment, for domination, etc.

(3) Cognitive needs, such as the need to plan, to learn a skill, etc. (Wilson, 2006, p. 663)

These categories have parallels with Maslow's hierarchy of needs, as illustrated in Table 5.

Table 5 - Information needs and basic needs

Wilson's Needs	Corresponding Maslow's Needs
Physiological needs	Physiological, Safety needs
Affective needs	Love, Belonging, Esteem needs
Cognitive needs	Esteem needs, Self-actualization needs

Markwei (2013) found that information needs corresponded to Maslow's hierarchy of needs in her study of information behaviour in Ghana. The homeless youth in Markwei's study found eleven types of information needs: "shelter, employment, money, fair wages, respect, security, skills development, justice, health, and education" (p. 303). Markwei (2013) found that these needs related to her participants' basic needs, based on Maslow's hierarchy of needs (2013, p. 303)

As previously mentioned, it has been suggested that the term "information needs" is inaccurate, and the process should instead be described as "information seeking towards the satisfaction of needs" (Wilson, 2006, p. 664). In a similar sense, the existence of an information need could also be described as an awareness of a basic need leading to an information need – knowledge of the best vendor at a market (physiological need for food), knowledge of how to effectively care for an infant (affective need for love/esteem), an understanding of the steps involved in submitting a application for a promotion (cognitive need for self-actualization). While an individual will recognise a need for information and engage in information seeking behaviour as a result of numerous different circumstances, scholars such as Wilson don't view an information need as an independent state, but rather a response to more fundamental set of contexts, situations, or conditions.

To avoid ambiguity, in this thesis I will continue to use the term "information need", while keeping in mind that it describes a response to more fundamental needs. While certain basic human needs are universal, the way in which individuals go about seeking information to satisfy

their needs are not. Information needs and hence information seeking behaviours, are contextually and individually dependent, even if they are a response to a universal basic need. This term is chosen because it is commonly used throughout the literature, and identifies several mental processes that begin with the perception of a basic need, and end with the understanding that information will help to resolve the initial need, through the articulation of the information need.

Paisley's 1968 work on information needs and uses describes the intertwined nature of human behaviour, information behaviour, and the social environment. He sees human behaviour as being influenced by several different systems that can neither be examined independently from each other nor can their influence on human behaviour be separated from other systems' influences. He identifies the following "complex systems that affect the flow of information", all of which are contextual and often times situational as well:

1. The full array of information sources that are available
2. The uses to which information will be put
3. The background, motivation, professional orientation, and other individual characteristics of the user
4. The social, political, economic, and other systems that powerfully affect the user and his work
5. The consequences of information use—e.g., productivity (Paisley, 1968, p. 2)

Paisley's (1968) discussion articulates, for him, the inseparable nature of information behaviour and context. He suggests that not only information behaviour, but also information need is dependent upon the individual's cultural system, political system, membership group, economic system, individual psychological system, as well as his or her information system or information resource base (Paisley, 1968). Therefore, one could infer that like snowflakes, no two acts of information seeking behaviour will be identical, as the contextual and situational factors surrounding information behaviour, including the systems and needs influencing the individual as well as the interaction with the information itself, will be unique.

As previously mentioned, Wilson suggested that information seeking is driven by basic human needs, which are dynamic. Multiple considerations may be involved in an individual's decision

to address an information need, or how the individual goes about seeking information to satisfy his or her need, such as the importance of satisfying the need, the consequences of the lack of information, the availability of information sources, and the costs associated with using them (Wilson 2006). One can infer that numerous embedded factors directly and indirectly affect the more overt information-seeking behaviour considerations as mentioned above. These can include physical factors, such as age and gender; social factors such as membership in a group; environmental factors with regard to availability of information systems and information resources; economic factors; linguistic factors; educational factors; and cultural factors, including embedded cognitive practices. The possibility that information needs may be satisfied without ever engaging in information seeking is feasible, and often attributed to serendipity. The possibility that the information needs themselves are never recognised also exists. In many situations, personal, interpersonal, and environmental factors may impede or facilitate information-seeking behaviour or the identification of information needs, enabling or hindering effective resolution of the information need, depending on the context and individual.

Needs in a developing country

While a great deal of research on information needs and information needs analysis has been conducted, general investigation into information needs in developing countries has been limited. More than a dozen publications have investigated information needs in developing countries as related to specific types of information, such as health information. These studies are summarised below in Table 6:

Table 6 – Studies of information needs in developing countries

Author	Title of study	Type of needs investigated	Country of research
Borzekowski, D. L. G., Fobil, J. N., and Asante, K. O. (2006)	Online access by adolescents in Accra: Ghanaian teens' use of the Internet for health	Health	Ghana
Ikoja-Odongo, R., and Ocholla, D. N. (2003)	Information needs and information-seeking behavior of artisan fisher folk in Uganda.	Professional	Uganda
Momodu, M. (2002)	Information needs and information seeking behaviour of rural dwellers in Nigeria: a case study of Ekpoma in Esan West local government area of Edo state, Nigeria	Professional (agricultural workers)	Nigeria
Njoku, I. F. (2004)	The information needs and information-seeking behaviour of fishermen in Lagos state, Nigeria	Professional	Nigeria
Zawawi, S., and Majid, S. (2001)	The information needs and seeking behaviour of the IMR biomedical scientists	Professional	Malaysia
Patitungkho, Kingkaew; Deshpande, Neela J. (2005)	Information seeking behaviour of faculty members of Rajabhat universities in Bangkok.	Professional	Thailand
Hirwade, Mangala Anil (2010)	Responding to Information Needs of the Citizens through E-Government Portals and Online Services in India	Government	India

Based on the scope of the articles described above, it would appear that limited research into everyday information behaviour has thus far taken place in non-Western societies. The majority of prior research focuses on needs in a specific type of user and/or a specific genre of information. In addition, no research into information behaviour in Laos has thus far occurred, though Dorner and Gorman (2006) have explored information literacy in the Lao context.

2.2.2.2. **Information seeking**

Once an individual has perceived his or her information needs, as discussed above, he or she may then engage in information seeking behaviour. Case (2002) defines information seeking as “a conscious effort to acquire information in response to a need or gap in your knowledge (p. 5)”. Numerous information science researchers have investigated information seeking in various contexts, a great deal of which has been conducted from a system perspective, investigating how users interact with various information retrieval systems.

According to Kuhlthau (1991), “information systems and the intermediaries who manage them traditionally have been driven by a bibliographic paradigm centred on collecting and classifying texts and devising search strategies for their retrieval” (p. 361). Kuhlthau suggested that this emphasis on the collection and classification of resources via systems that were designed solely to record bibliographic data has resulted in “a view of information use from the system’s perspective and has concentrated retrieval on questions that best match the system’s representation of texts rather than responding to users’ problems” (p. 361). Kuhlthau proposed a user-centred approach to investigating information seeking that also took the context of the information user into consideration. Kuhlthau then conducted a number of studies into what she entitled the “information search process” and found “uncertainty and anxiety” to be “an integral part of the process, particularly in the beginning stages” (p. 361).

Kuhlthau’s research into information seeking was informed by Dervin’s (1983) conceptualisation of sense-making (Kuhlthau, 1990, p. 361). Kuhlthau described the information search process as culminating “in a new understanding or a solution which may be presented and shared” (p. 361). Kuhlthau suggested that “evidence of the transformation of information into meaning is present in the products or presentations in which users share their new knowledge with others” (p. 361). Research conducted by Kuhlthau (1990), and Dervin (1983) suggest that

conceptualising information seeking as an integrated process directly interconnected to information needs and information use is the most appropriate method for investigating information behaviour. Kuhlthau went on to suggest context is “an essential component for understanding information seeking behaviour” (Kuhlthau & Vakkari, 1999, p. 723).

Kuhlthau’s information search process “is the result of two decades of empirical research that began with a qualitative study of secondary school students and the development of the initial model in 1983” (Kuhlthau, 2005, p. 230). The resulting model includes the following six stages of the information search process:

1) *Initiation* — a person becomes aware of a lack of knowledge or understanding, making uncertainty and apprehension common.

2) *Selection* — a general area, topic, or problem is identified and initial uncertainty often gives way to a brief sense of optimism and a readiness to begin the search.

3) *Exploration* — inconsistent, incompatible information is encountered and uncertainty, confusion, and doubt frequently increase.

4) *Formulation* — a focused perspective is formed and uncertainty diminishes as confidence begins to increase.

5) *Collection* — information pertinent to the focused perspective is gathered and uncertainty subsides as interest and involvement in the project deepens.

6) *Presentation* — the search is completed, with a new understanding enabling the person to explain his or her learning to others, or in some way to put the learning to use. (Kuhlthau, 2005, p. 230-231)

One principal focus of Kuhlthau’s research is the affective side of information seeking, in which she found that “people experience the Information Search Process holistically, with an interplay of thoughts, feelings, and actions” (Kuhlthau, 2005). Subsequent research into information behaviour has investigated other components of information seeking.

According to Wilson (2006), there are four categories of information seeking behaviours, ranging from Category A, where an individual directly seeks and accesses the information required, to Category D, where sophisticated technology searches for information on behalf of the individual. In the context of a developing country, we can seek to identify the types of search strategies most commonly used, in order to gain a better understanding of how individuals address and resolve their information needs. For example, Wilson (2006) suggested, "we may wish to investigate Category A strategies to discover whether they are undertaken in ignorance of formal information systems, or because they are more efficient or more effective" (p. 662). Such a question may be useful in helping to understand the information seeking behaviour of individuals in developing countries. However, questions regarding the information seeking strategies themselves may never address the fundamental question of "information need": why an individual decides to seek information, to what purpose the individual believes it will serve, and to what use the information is actually put when received. These types of questions are also of interest to the researcher, particularly when the aim of the inquiry is to identify the individual or contextual factors affecting information needs and information seeking behaviour in a developing country, as compared to other individuals, and other contexts.

2.2.2.3. Information use

Information use is often regarded as the final stage or component of information behaviour. According to Savolainen (2008), "the phenomena of information use are explored in various disciplines", including "cognitive science, communication studies, consumer research, management science, philosophy and information studies" (p. 188). Savolainen (2008) also described the lack of consensus within library and information science (LIS) regarding the definitional nature of "information use", and the ambiguity surrounding how it is conceptualised. In the sense-making methodology information use is conceptualised in terms of gap-bridging, unlike other areas of LIS research literature, where information use is "frequently referred to but rarely explicated" (Savolainen, 2008, p. 187) and may be more ambiguous.

Research in cognitive science has been more explicit in characterising information use. Brookes (1980) developed a "fundamental equation" which conceptualises information use in a "pseudo-mathematical form" because, according to Brookes "it is the most compact way in

which the idea can be expressed (p. 131)". The equation he developed to express information use,

$$K[S] + \Delta I = K [S + \Delta S]$$

states that "the knowledge structure $K[S]$ is changed to the new modified $K [S + \Delta S]$ by the information ΔI , the ΔS indicating the effect of the modification" (Brookes, 1980, p. 13). This change in the knowledge structure, achieved through new information being integrated into the existing knowledge structure, is a useful way of conceptualizing information use.

Scholars such as Belkin and Vickery (1985, pp. 11-12) suggested that information needs and uses are interdependent, influencing one another in a complex way that determines many aspects of individuals' behaviour. They also suggest that an understanding of the purposes for which the information is sought, or its ultimate uses, must be identified in order to evaluate and understand information behaviour (pp. 11-12). This prerequisite may pose as a barrier to fully understanding the nature of information behaviour in culturally and linguistically diverse contexts, where individuals may not necessarily be aware of their information needs, or able to articulate the ultimate uses of the information they seek.

2.2.3. Information practices

While historically, the term "information behaviour" has dominated information science literature related to how individuals interact with information, recently the term "information practices" has also begun to be used extensively throughout the literature.

The concept of "information practices", while similar to that of "information behaviour", has some key conceptual differences. Throughout this research I have conceptualised the difference between information behaviour and information practices as:

Where information behaviour describes the totality of information-related activities that individuals or groups may engage in, information practices are the specific and unique ways in which information behaviour is manifested in an individual.

This can also be visualised using the following model (Figure 6):

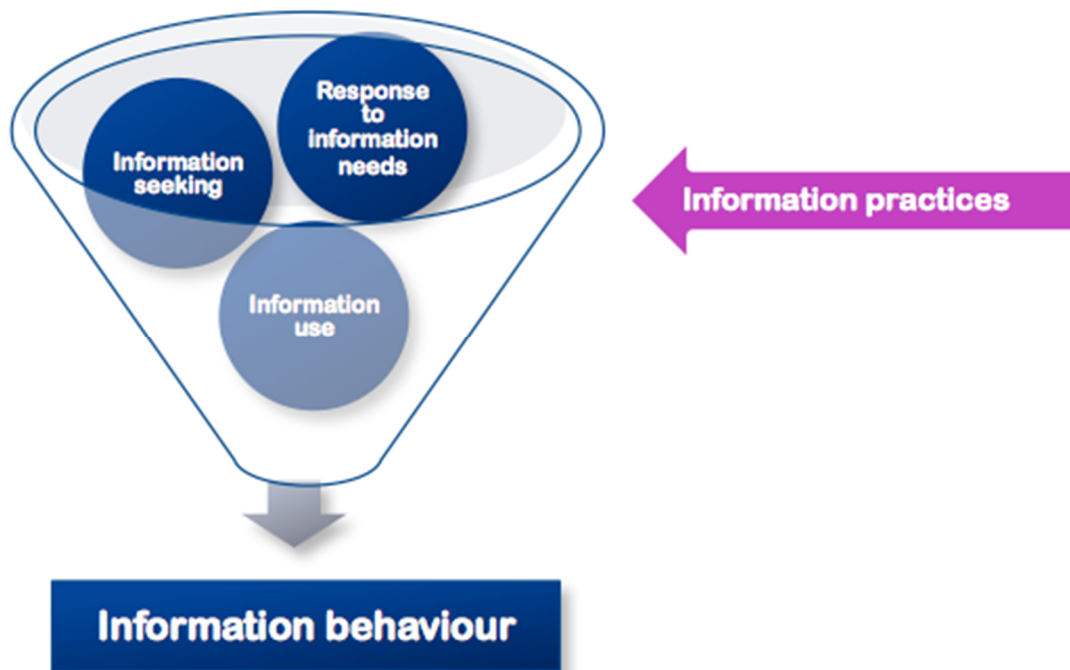


Figure 6 - Information practices and information behaviour

Tuominen, Talja, and Savolainen (2005) suggest that for research within the social constructionist paradigm, employing the term *information practices* is more appropriate, as this concept recognises that human practices are social, with interaction and interchange amongst individuals at the origin of most behaviours and actions. Therefore, the processes of information seeking and use are also socially developed, rather than individually constructed (Tuominen, Savolainen, & Talja, 2005). I undertook this research conceptualising information practices as being products of social interaction. An investigation into the social and cultural contexts of the research participants supports a richer understanding of how those contextual dimensions influence information practices. However, due to the dominance of the term *information behaviour* within LIS research, and the considerable overlap of the two terms, I have preferred to use *information behaviour*, unless specifically describing an individual's information practices. In addition, in this literature review the terminology of the authors of specific articles is used in the discussion of the content of those articles. I have also used the term *information activities* in this thesis to describe specific information related activities in which individuals engage in a given situation, rather than the more general *information practices*.

The processes of information seeking and use are equally central to information behaviour as to information practices. According to Savolainen (1997) social constructionist perspective of information practices means that the focus on behaviours, actions, and skills of individuals is shifted to a conceptualisation of the individual as a member of a group or communities, and it is within this context that information practices are examined. I employed the same perspective, reflecting on the individual participants as group members or community members, rather than solely as independent entities.

Research into information practices is often underpinned by social constructionist theoretical frameworks. Courtright (2007) identified several scholars, including Chatman (1999), McKenzie (McKenzie, 2001, 2003), and Savolainen (Savolainen, 1992, 1995, 2007, 2009a, 2009b, 2013; Tuominen & Savolainen, 1997) who support the idea that “information activities take place within an explicit or implicit social community whose knowledge, characteristics, expectations, and norms are internalized, to varying degrees, within the individual” (p. 289).

2.2.4. Everyday-life information seeking and everyday information practices

Another important sub-set of information behaviour research that deserves consideration as it bears relevance to my research is that of “everyday life information seeking”. According to Chatman (2000), “ordinary people experience information in response to everyday needs and concerns” (p. 1).

Information seeking to satisfy non-work or school related needs is commonly called “everyday-life information seeking” (ELIS). This type of information seeking can be active or passive, and includes incidental information obtained through non-purposive actions. This type of information seeking behaviour can reveal a great deal about the larger information practices of an individual, which can in turn reveal clues regarding diverse social and cultural factors. As opposed to professional or academic information seeking, ELIS is the type of information seeking that is the most embedded in routine behaviour, the most intuitive, and therefore the most representative of underlying cultural/social contexts. Yu (2010) concurred with this opinion, finding that general information practices on a daily basis are more meaningful than information practices in a particular context, such as work or school.

A benchmark study conducted by Savolainen (1995) outlined a method for investigating ELIS behaviours that was used to compare the information behaviour of two different groups of individuals; teachers and factory workers. This method of investigation involved use of critical incident technique (see section 3.3.1.2) for a recent (information) “problem” or “decision” that needed to be resolved. Savolainen used this technique of data collection to illustrate the effect of class or social group on information behaviour. This method of understanding information seeking behaviour can also be used to explore different “information orientations”, as well as barriers and enablers to information seeking in a specific context. These barriers and enablers may be contextual, or situational. Some barriers to information seeking identified by Wilson (2006) include:

- 1) Personal (e.g.. Motivation)
- 2) Interpersonal (e.g. Group dynamics)
- 3) Environmental (e.g. Physical access)

Chen and Hernon (1982) also examined what they called “non-work information seeking”, in an earlier study. Belkin and Vickery (1985) examined everyday life information seeking in “non-institutional settings”. Their research approach was grounded in the critical incident technique, and began with consideration of the individuals’ everyday problems, after which the research aimed to discover how these problems were resolved, and finally investigated the explicit use and source of information in the resolution of the everyday problems (Belkin & Vickery, 1985).

When investigating everyday-life information seeking, it is important to articulate the exact nature of “everyday-life” for the individuals studied. Courtright (2007) suggested that “in several studies, ‘everyday life’ is given as the context but without a description or analysis of what constitutes actors’ everyday lives”(p. 282). This observation was taken into account during data collection and data analysis.

While most of the research into ELIS has focused solely on information-seeking behaviour, a broader conceptualisation would address all aspects of information behaviour. Therefore, a more appropriate description of the information behaviour in which I am interested would include everyday information needs, seeking and use. For the sake of consistency and clarity,

the term “everyday information behaviour” has been selected as the most appropriate and descriptive.

Harris and Dewdney (1994) found that people follow habitual patterns in seeking everyday information (p. 27). Their findings revealed that individuals prefer to seek information that is easily accessible, often from interpersonal sources. In addition, Harris and Dewdney concluded that people prefer interpersonal sources of information such as friends, relatives, or co-workers rather than information from institutions or organizations; unless there is a particular reason for avoiding interpersonal sources.

However, Harris and Dewdney’s study was conducted in North America before widespread use of the Internet for information seeking. The results of their study may not hold true in contemporary North America. Conversely, their assumptions may be relevant in the context of Laos, where Internet use still remains low. However, the universality of Harris and Dewdney’s findings are, at this time, unknown.

The conclusions reached by Harris and Dewdney led Fisher et al. (2005) to also observe that “one can conclude or at least hypothesize that barring special circumstances, people turn to other people when seeking everyday information” (n.p.). These conclusions are relevant to my research, as the information under investigation is of an everyday nature, and is most likely to come from other individuals in the same social environment.

Chatman (1996, 1999) explored everyday information in specific contexts extensively throughout her research, and developed the theory of information poverty in response to some of the information behaviour she found. More discussion of Chatman, and her work’s relevance to my research is provided in section 2.2.5.3.

2.2.5. Theories and models of information behaviour

A number of models and theories of information behaviour have emerged over the past several decades with the aim of developing a better understanding of how humans interact with information. Similarly to the definition described in section 1.1, Wilson (2000) described information behaviour as the “totality of human behaviour in relation to sources and channels

of information, including both active and passive information seeking, and information use” (p. 49). Savolainen (2007) conceptualized information behaviour as including, but not limited to, how people need, seek, manage, give and use information in different contexts. These different ways of conceptualising information behaviour have resulted in a number of different theories that attempt to explain and model information behaviour. Some of the more relevant theories and models of information behaviour are explored in this section, particularly those that take contextual factors into consideration.

Some better-known models of information behaviour have been developed by Wilson (1997), Kuhlthau (2005), and Dervin (1998). Figure 7 below illustrates Wilson’s conceptualisation of information behaviour:

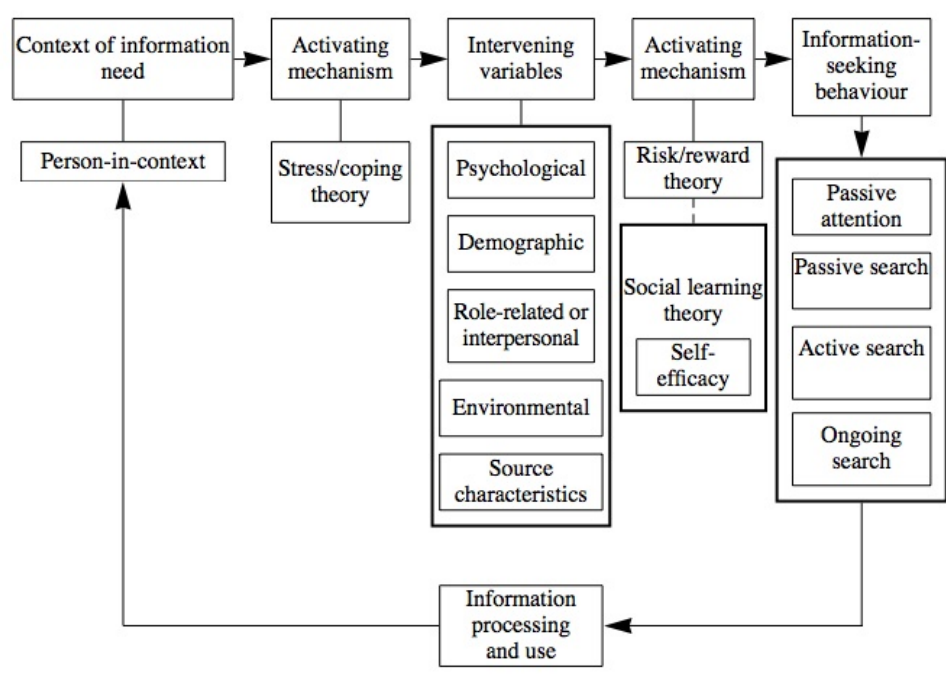


Figure 7 - Wilson's model of information behaviour (Wilson, 1999, p. 257)

These theories and models of information behaviour have evolved and been refined over time. Dervin, in particular, began writing about the use of sense-making in information behaviour research as early as the 1970's. Her model, called "Sense-making", and others, have been

proven relevant in many contexts, however, they all have emerged from Western, developed-world contexts.

Both Dervin and Wilson's models are amongst the few information behaviour models that emphasise context however, there has been little empirical research into the operationalization of these models in non-Western contexts. My research has been informed by both Wilson and Dervin's conceptualisations of information behaviour. Wilson's model of information behaviour has provided a background and overview of a generalised approach to examining information behaviour. Dervin's theory of sense-making in information behaviour in particular has informed the development of the research design. This theory and relevant existing research is explored in section 2.2.5.1. The influence of sense-making upon the research methodology is described in section 3.2.1.

According to Lilley (2010), although models of information behaviour have been applied in different countries and in multicultural situations, "they have generally not been applied to research involving indigenous peoples" (p. 67). Lilley also recognised the lack of cultural relativism or awareness of cognitive pluralism present in extant information behaviour models, suggesting that the aforementioned models may not be representative of indigenous peoples information seeking and information behaviour. Lilley suggested that it may be "pertinent to point out that [the aforementioned information behaviour models] have been developed with non-indigenous research participants and organisations in a Western focused ideological research tradition" (p. 67). However, Lilley also points out the fact that the creators of the previously mentioned models "largely operate in research environments that have no or little indigenous input" (p. 67), and the possibility of contextual or cultural differences may simply have not occurred to them.

As mentioned in the introduction to this research, there are many existing theories of information behaviour, though not all of them are relevant to this study. In particular, those theories which highlight context as an important factor are of relevance, and are described in greater detail in the following sections.

Theories that may be applied to this research so as to address the research questions are also of critical importance, both in building the underlying theoretical perspective of the research, and in the application of the theory to the data with regard to developing findings.

For these reasons, my research has been principally informed by three significant theories of information behaviour. Dervin's "Sense-Making" theory of information behaviour is relevant and described in the following section. While many theories of information behaviour have been developed and honed over the years to reflect important investigations into information science, I have limited this discussion to the most pertinent theories.

2.2.5.1. **Sense-making**

Sense-making in theory and practice has been in development for over 30 years (Naumer, Fisher, & Dervin, 2008). According to Naumer, Fisher and Dervin (2008) "Dervin's approach focuses on better understanding the ways people make sense out of information toward the goal of informing the development of better information and communication systems" (p. 1). In her development of the sense-making theory, Dervin was one of the first scholars to shift emphasis from the process or system, to the individual in information behaviour (Tidline, 2005). Dervin (1992) describes sense-making as above-all "a set of metatheoretic assumptions and propositions about the nature of information, the nature of human use of information, and the nature of human communication" (p. 62). Tuominen and Savolainen (1997) also recognise the important role of communication in information behaviour, and go so far as to define information as "a communicative construct which is produced in a social context" (p. 89).

Sense-making focuses on behaviour (Dervin, 1992, p. 65). For this reason, the sense-making perspective proposes that human use of information and information systems must be conceptualised as behaviours. This can be illustrated by Dervin's "sense-making metaphor", pictured in Figure 8 below.

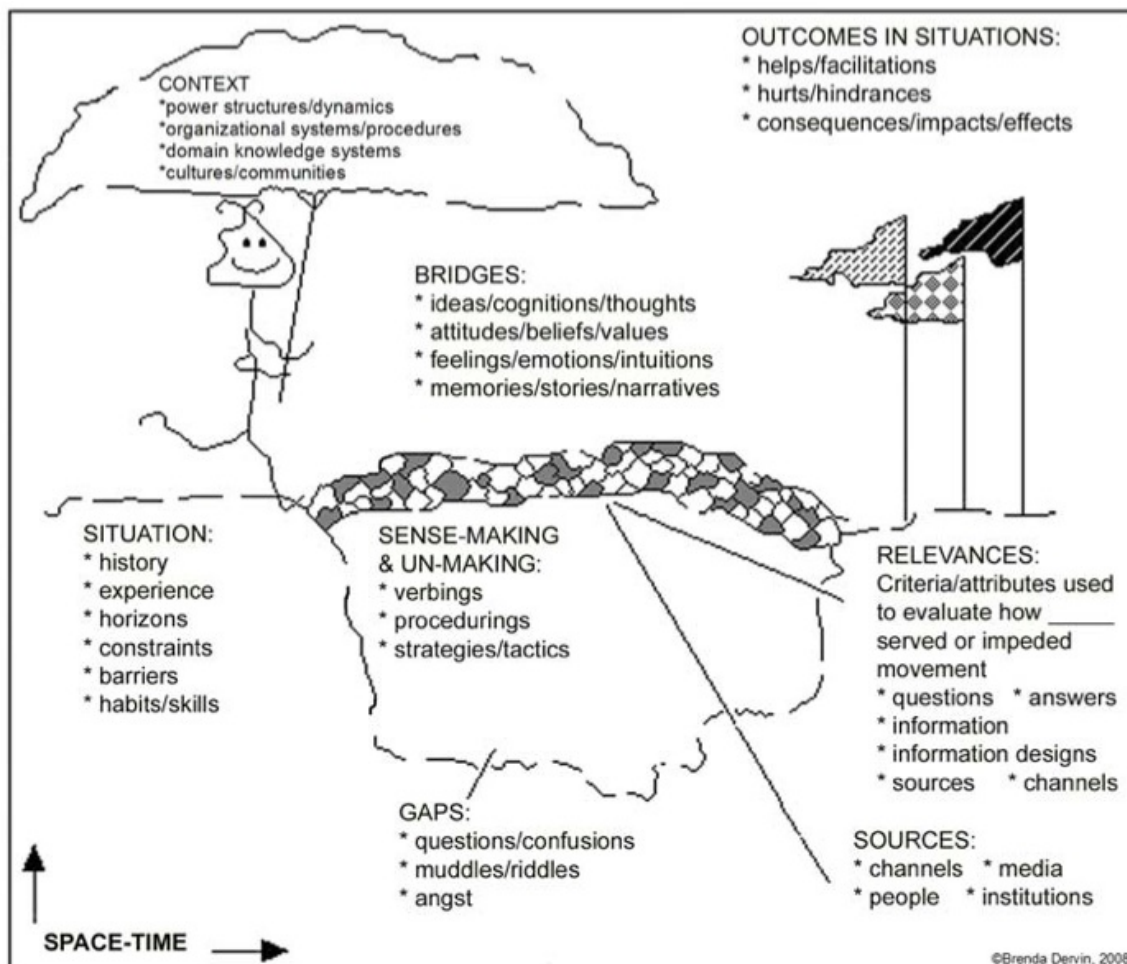


Figure 8 - Dervin's Sense-making metaphor (Dervin, 2008, p. 17)

The sense-making metaphor is summarised by Naumer et al. (2008) as follows:

A person is seen as embedded in a context-laden situation, bounded in time-space. The person pictured as crossing a bridge is used to metaphorically describe the way that humans are mandated by the human condition to bridge gaps in an always evolving and ever-gappy reality. The person is seen facing a gap (i.e., a sense-making need) that arises out of a situation. Through the process of gap bridging, people seek inputs (sometimes the stuff systems call information) and engage in other activities through the time-space continuum that lead to outcomes. (p. 2)

Dervin's sense-making metaphor provides researchers with an opportunity to investigate phenomena such as information behaviour with an explicit emphasis on the contextual nature of the behaviour under investigation. The methodology Dervin developed to investigate the sense-making metaphor is referred to as the sense-making methodology, or SMM.

Dervin (2008) prefers to conceptualise and describe these behaviours using the dynamic language of verbs, rather than the inactive language of nouns. For this reason, Dervin uses the term *verbings* to describe behaviours or *step-takings*. Dervin goes on to suggest that “these step-takings, or communicatings, involve both internal behaviors (comparings, categorizings, likings, dislikings, polarizings, stereotypings, etc.) and external behaviors (shoutings, ignorings, agreeings, disagreeings, attendings, listenings, etc.)” (p. 65).

The *step-takings* or components of the sense-making metaphor are:

Situation

Situation refers to the history, experiences, horizons, constraints, barriers, habits and skills unique to each individual and each sense-making situation (Dervin, 2008, p. 17). Because each individual begins each sense-making situation from a different point in his or her time-space continuum, the “situation” as perceived by the individual varies considerably. How the interviewee chooses to articulate his or her situation is also related to this contextually-laden point in space-time.

Gap

Dervin’s notion of the *gap* plays an extremely important role in the sense-making activities. Because *gap* can refer to “questions, confusions, muddles, riddles, angst”, the gap identified during the interview or analysis does not necessarily have to be phrased as an explicit question. However, awareness of a gap in knowledge often acts as an impetus for engaging in information behaviour.

Sense-making

As the name implies, the actual sense-making behaviour is crucial to understanding and accurately applying the Dervin describes Sense-making as “verbings, procedures, strategies, and tactics” in her sense making metaphor (Figure 8 above). This component of sense-making involves the information seeking activities in which the individual engages.

Bridge

While the sense-making component of the sense-making metaphor refers to the actions and verbs used to respond to a gap in an individual's understanding, the bridge can be described as what makes these activities possible. According to Dervin's Sense-making metaphor (Figure 8 above), a bridge consists of the "ideas, cognitions, thoughts, attitudes, beliefs, values, feelings, emotions, intuitions, memories, stories, and narratives" that form the basis for the sense-making activity.

Outcome

In the sense-making metaphor, any outcome is possible, whether or not the information need is resolved. Dervin refers to situations in which the gap in understanding is either not resolved or made more ambiguous as *sense-unmaking* (1998; 1999). According to Dervin (2008), outcomes include "helps, facilitates, hurts, hindrances, consequences, impacts, and effects".

Sense-making has been used to investigate information behaviour in numerous instances. Cardillo (1999) investigated the information behaviour of young people with chronic illnesses. Cardillo chose to ground her study in Sense-Making theory and method because of "Sense-Making's attention to and privileging of the perspective and voice of the subject, speaking on his or her own terms" (n.p.), which, according to Cardillo, were crucial in investigating "adolescents' accounts of their experiences of illness in health communication research" (n.p.).

Numerous other studies have also used SMM to investigate human information behaviour. Choemprayong (2010) investigated information behaviour during the 2006 coup d'état in Thailand in his doctoral dissertation using a methodology influenced by SMM. While Choemprayong's use of SMM was limited use of Dervin's "Micro-moment time-line" interview technique to collect data regarding the information behaviour of bloggers and writers, the theoretical framework behind SMM provides a robust foundation from which to study information behaviour that recognises the role of contextual factors in information behaviour. Indeed, according to Dervin (1999) "Sense-Making's assumptions about the nature of human beings are necessarily related to assumptions about the nature of reality, and the nature of knowing" (p. 730). Therefore, the use or influence of SMM upon a research methodology would also have implications for the research paradigm. The influence of SMM on the research paradigm employed in this study is discussed in section 3.3.1.

SMM provides a framework from which to investigate information behaviour, emphasising certain approaches to conceptualising and conducting research which are of great importance to the current study. These include:

- Sense-making emphasises the investigation of the human use of information and information systems from the perspective of the actor, not from the perspective of the observer. "Almost all our current research applies an observer perspective" (Dervin 1992, p. 64).
- The sense-making metaphor is seen as applying at all levels of information use and information seeking (intrapersonal, interpersonal, small group, organizational, mass, database, societal, etc.) and in all contexts (health, political, scientific, instructional, etc.) (Dervin 1992, p. 70).
- Sense-making directs attention to the steps the actor takes as defined on the actor's own terms to address the gaps he or she faces as defined on his or her own terms (Dervin 1992, p. 70).
- SMM has been defined as "utopian" because it looks beyond hegemony and habitus to how systems might be designed to be more responsive to human needs (Dervin 2008, p.6).
- SMM has also been developed as an inherently participatory and dialogic methodology (Dervin 2008, p.7).
- SMM has intentionally defined context as an inextricable surround (Dervin 2008, p.9).
- The sense-making approach also regards the context of information behaviour as dynamic; stating that "nor can it be assumed that any manifestation of human sense-making (e.g. knowledge, learning) remains static. Rather, it is assumed that humans are involved in a constant journey through sense-makings and sense-unmakings" (Dervin, 1999 p. 731).

In addition, Savolainen (1992) identified important implications of sense-making, namely that the researcher obtains a detailed picture of the ways people build cognitive strategies in problematic situations. In addition, Savolainen believes that people participating in the research benefit from it. According to Savolainen (1992), when the participants "consider the factors connected with some problematic situation, trying to define their freedom within

situations, as well as structural constraints connected with them and the bridges by which they have managed to cross the 'gap,' they concomitantly understand better their individual approaches and limitations in solving" (p. 25).

These underlying frameworks and assumptions upon which sense-making and the SMM have been built provide evidence for the relevance of sense-making to my research. In particular, the role of context in sense-making makes it an ideal technique for investigating the everyday information behaviour of individuals in Laos. Sense-making and SMM have most greatly influenced this research at the research design and methodological level, described in chapter three. In particular, sense-making has informed the development of the data collection methods and tools.

2.2.5.2. Information poverty

Chatman (1996, 1999, 2000) introduced the theory of information poverty as a way to explain self-protective behaviours that individuals may use to avoid information in certain communities. She referred to these social environments as *small worlds* that involved the life of "legitimised others" or "outsiders" (Chatman, 2000). Chatman described a *small world* as a group of "people who share physical and/or conceptual space within a common landscape of cultural meaning" (2000 p. 3). In this sense, any community or group of individuals who share cultural values can be considered a small world, the key being that individuals within a group share similar conceptualisations of the world around them. In the groups examined by Chatman (Chatman, 1996, 1999, 2000), it was found that certain behavioural barriers prevented individuals from accessing information, despite its relevance and potential usefulness to the individual. Chatman identified the factors influencing these kinds of behaviours and developed the theory of information poverty.

Chatman goes into a great deal of detail regarding the relationship between information behaviour and social norms. According to Chatman (2000), "normative behaviour is that behaviour which is viewed by inhabitants of a social world as most appropriate for that particular context" (p. 13). Chatman's research, supported by social constructionist theory described by authors such as Berger and Luckmann (Berger & Luckmann, 1966), found that normative behaviour, including information behaviour, was driven by mores and norms, and

according to Chatman (2000) provided individuals with “a predictable, routine, and manageable approach to everyday reality” (p. 13). Chatman reported being interested in “those things which serve to legitimize and justify values, which embody social existence” (Chatman, 2000, p. 13), also of interest to this study. In Chatman’s case, she sought to identify behaviour that led to information avoidance in the everyday lives of “legitimised others” in a Western society context. I identify those contextual factors that contribute to information behaviour in a non-Western society in my research.

Chatman (2000) developed a series of proposition statements that reflect her research findings, reproduced below.

Proposition 1

Social norms are standards with which members of a social world comply in order to exhibit desirable expressions of public behaviour.

Proposition 2

Members choose compliance because it allows for a way by which to affirm what is normative for this context at this time.

Proposition 3

World-view is shaped by the normative values that influence how members think about the ways of the world. It is a collective, taken-for-granted attitude that sensitizes members to be responsive to certain events and to ignore others.

Proposition 4

Everyday reality contains a belief that members of a social world do retain attention or interest sufficient enough to influence behaviour. The process of placing persons in ideal categories of lesser or greater quality can be thought of as social typification.

Proposition 5

Human information behaviour is a construct in which to approach everyday reality and its effect on actions to gain or avoid the possession of information. The choice to decide the appropriate course of action is driven by what members' beliefs are necessary to support a normative way of life.

(Chatman, 2000, p. 13-14)

While all five propositions bear relevance to my research, the 5th proposition, which articulates the relationship between information behaviour and a normative way of life, dictated by social norms as described in the first proposition, is of particular significance. This proposition supports the theory that information behaviour is primarily a socially determined behaviour, as put forth in section 2.2. With the identification of these propositions Chatman provides further justification for my undertaking of this study.

Chatman also discovered that “even though the boundaries of that world are set by social norms, most members feel disinclined to cross them” (2000, p. 11). This idea resonates with a similar statement made by Dervin, in which she described how society and societal structure are “energized by, maintained, reified, changed, and created by individual acts of communicating.” (1992, p. 67). Despite being constructed and energised by individuals, norms and values are a product of a group, and “others” or “outsiders” can do little to influence overall social norms. According to Nagel (1994) groups construct and reconstruct culture in an on-going process (p. 162). The way in which culture is constructed is of relevance to this research, as an understanding of the relationship between the individual and his or her social environment is crucial to unravelling the complex nature of in the individual and his or her behaviours.

In conclusion to her research into *small worlds* in the USA, Chatman found that “cultural and social norms do affect ways in which the people choose to respond, be passive, or ignore information” (2000, p. 16). In particular, she found that “respondents were not engaging in information-seeking or sharing behaviors because they wanted to give an appearance of normalcy” (2000, p. 6). Chatman suggested that this avoidance of information-seeking despite awareness of information needs was due to the fact that the individual “did not want to be viewed as somehow less capable than their neighbours in coping with life-stresses” (2000, p. 6). These findings also have implications for my research, as similar information behaviour is present in some of the incidents under examination.

More discussion on insider/outsider status can be found in section 8.4.2.

2.2.5.3. Other theories of information behaviour

A number of other theories of information behaviour have also influenced the development of this research. Wilson's (2000) model, shown in

Figure 7 (p. 53), was initially developed in the 1980's, and later refined into his 1999 model, and contributed to the conceptual framework used in my research. For this reason, a thorough understanding of Wilson's conceptualisation of information behaviour is useful in providing background understanding for the framing of my research.

Wilson (2000) conceptualised information behaviour as behaviour related to problem solving, in which information seeking, searching and use are associated with different stages of a "goal directed problem-solving process" (Wilson, 2000, p. 53). Wilson's model was proposed as a way of integrating research in information science into existing models, and Wilson suggested that Kuhlthau's model and others can be related to his model (Wilson, 2000, p. 53).

In Wilson's updated model, the person in context is the focus of information needs. Furthermore, factors influencing information behaviour are represented as "intervening variables" rather than "barriers" as in other models, which suggests that "their impact may also be supporting of information use as well as preventative" (Wilson, 1999, p. 255). In Wilson's 1999 model information-seeking behaviour consists of different phases of the search process, and "'information processing and use' is shown to be a necessary part of the feedback loop, if information needs are to be satisfied (Wilson, 1999, p. 256). Wilson's refined model also presents three relevant theoretical ideas:

- Stress/coping theory, which attempts to explore why some needs do not prompt information-seeking behaviour;
- Risk/reward theory, which explores why certain sources of information may be used more than others by a given individual; and
- Social learning theory, which represents "the concept of 'self-efficacy', the idea of 'the conviction that one can successfully execute the behaviour required to produce the desired outcomes'" (Wilson, 1999, p. 256).

According to Wilson (1999), the model is one of “macro-behaviour” (p. 256). However “its expansion and the inclusion of other theoretical models of behaviour make it a richer source of hypotheses and further research than Wilson’s earlier model” (p. 256), and thus has been influential in the development of this thesis.

Kuhlthau’s theory of information behaviour also contributed to my conceptual framework for this research. While Kuhlthau’s theory of the “information search process”, described in section 2.2.2.2, does articulate the important role of the information user in information behaviour, as well as the affective components of information seeking, the emphasis on the information system and the information itself, makes it less suitable for research into the relationship between context and information behaviour. However, an understanding of Kuhlthau’s benchmark theory is relevant to any information science research, and therefore a discussion of the information search process has been included in this review of the literature.

Tuominen and Savolainen’s (1997) social constructionist approach to information behaviour prompted Fisher, then writing as Pettigrew, to develop the “Information Grounds Theory”. She later defined “information grounds” as “synergistic environments temporarily created when people come together for a singular purpose but from whose behaviour emerges a social atmosphere that fosters the spontaneous and serendipitous sharing of information” (Fisher, Marcoux, Miller, Sánchez, & Cunningham, 2004, n.p., adapted from Pettigrew, 1999 p. 811). Information grounds are also contextual domains of interaction and information exchange, and therefore important to include in this literature review.

2.2.6. Gaps in existing information behaviour research

The essential question this research aims to explore is: What are the contextual factors that affect information behaviour in a non-Western, developing country? As mentioned previously, little investigation into the relationship between contextual variables such as culture and information behaviour has taken place, and the research that has occurred has been limited in its scope. Several scholars are aware of this gap in the research, including those listed in Table 7 below.

Table 7 – Scholarly recognition of the gap in LIS literature

Author	Evidence of gap
Courtright (2007)	"The prevalence of user-centred INSU [information needs, seeking and use] research that introduces context as a simple setting in which information activities take place, then concludes at the end that more needs to be known about the role of context in explaining the information activities that are documented in the study" (p. 291).
Erdelez (1999)	"I believe that as a field LIS needs to develop holistic and detailed tools for modelling information users' behaviour" (n.p.).
Julien and Michels (2004)	"If the role of context or situation in information behaviour is going to be fully elucidated outside of work or academic contexts (two favourite contexts for information behaviour research), then further, more detailed, research is needed into how specific aspects of context are related to information behaviour in daily life" (p. 561).
Komlodi (2005)	"Most of the existing cross-cultural IB research reports differences in behavior, without examining cultural variables to identify why these differences occur" (p. 112).
Menou (1983)	"The common belief that information would be intrinsically communicable worldwide, but for the need to overcome some (few) specific cultural barriers, and some economical, technical and legal ones as well is partial and inadequate" p. 121.
Spink and Cole (2001)	"What is needed is, first, a deeper understanding of ELIS (everyday life information seeking) from diverse cultural and social situation perspectives; second, the development of generalizable process models that hold across situations; and finally, the integration of ELIS theories and models within a broader human information behavior context" (p. 304).
Steinwachs (1999)	"Much less work has been dedicated so far to intercultural research in other fields of the social sciences; notably, in information and knowledge theory" (p. 194).

While my research focuses on the information seeking and information use related to information needs, it is important to conceptualise information behaviour as also taking into account the numerous ways individuals manage and disseminate information. This conceptualisation includes the types of behaviours described and explored in knowledge management research examining personal knowledge management, which is closely related to information behaviour research. My research does not aim to explore the concepts of

knowledge management, but does conceptualize the management of personal knowledge to be a component of information behaviour.

2.2.7. Information literacy and information behaviour

Information literacy is an important component of information science that bears some relevance to the study of information behaviour. Since 2005 UNESCO; a major proponent of information literacy education in developing countries, has adopted the use of the Alexandria Proclamation's definition of information literacy; the objective of information literacy being to "Empower people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals" (Horton, 2008).

However, the nature of information literacy is considerably different from that of information behaviour. Where information behaviour and information practices approach interaction with information from a value-neutral perspective, information literacy has a desired set of outcomes, competencies, or skills. These skills can be transferred through information literacy education, which will permit an individual to go from being less information literate, or information illiterate, to being highly information literate. This dichotomy or continuum does not exist in information behaviour. However, the two concepts are related.

Boon, Johnston, and Webber (2007) suggest that information-seeking behaviour and information literacy are linked; yet, they argue that information literacy is in fact broader than information-seeking behaviour, as it encompasses personal, social, and ethical dimensions of interacting with information. They agree that the acquisition of appropriate information-seeking behaviour is one step towards becoming information literate; however, several other, additional skills must also be acquired in order to be considered fully information literate.

Information use describes the processes involved in integrating information into an individual's knowledge base, or transforming the information into knowledge. This dimension of information behaviour is also a competency or skill within most descriptions of information literacy, i.e., the use and evaluation of information.

Information literacy can be a contextual factor influencing information behaviour. For example, a lack of understanding of information communication technology, how to evaluate information sources, or lack of information management skills can result in less effective information behaviour. However, other contextual factors may contribute to an individual's information literacy. For this reason, an understanding of information literacy as one type of contextual factor has informed the current research.

2.2.8. Summary of information behaviour

Section 2.2 has explored literature related to information behaviour that is relevant to my research. Information behaviour is a vast area of scholarly inquiry, and I have aimed to selectively explore and summarize the salient points; namely existing research making the following inferences:

- Information behaviour research is comprised of information needs, information seeking, and information use, all of which have distinct sub-categories of research.
- The existing theories of information behaviour have generally emerged from Western, English-speaking contexts.
- Information is constructed by individuals and interpreted by them through embedded contextual influences.
- Information needs often arise from basic needs.
- Individuals generally prefer orally transmitted information.
- Individuals generally prefer habitual information seeking patterns.

As illustrated in the preceding sections, information behaviour is essentially a series of sensorimotor and cognitive processes. An understanding of cognitive processes including a broad range of mental activities such as perception, learning, remembering, thinking, interpreting, evaluating, reasoning, and decision-making help to support an understanding of how individuals interact with information. Models such as Dervin's "Sense-making metaphor", and Wilson and Kuhthau's models of information behaviour provide insight into how existing research has conceptualised information behaviour to this point. The majority of these models and existing research have defined information behaviour as how individuals need, seek, and use information, yet few of them specifically explore the contextual factors that affect

information behaviour. The following section reviews literature relevant to an understanding of context, which has informed this investigation into the relationship between contextual factors and information behaviour.

2.3. Context

This section explores concepts related to context, and how context is conceptualised throughout the literature, with specific emphasis on the role of context in information behaviour as this is the central theme of my research.

2.3.1. Definitional nature

According to Dervin (1997) there “is no term that is more often used, less often defined, and when defined, defined so variously as *context*” (p. 14). In reviewing the literature, Dervin’s observation has proved accurate. The *Oxford English Dictionary Online*’s definition of “context” has been slightly adapted to develop the following working definition used in this research:

The totality of circumstances that form the setting for an event, statement, or idea, and through which understanding is constructed.

The understanding mentioned in the above definition is conceptualised as being constructed amongst individuals, as my research has been undertaken from a social constructionist perspective. The social constructionist orientation is further described in section 3.1.2. Context, therefore, forms the background in which the individual, as well as his or her thoughts and behaviours, is embedded.

Dervin (1997) suggests that “virtually every possible attribute of person, culture, situation, behaviour, organization, or structure has been defined as context” (p. 14). She then goes on to suggest that “there is an inexhaustible list of factors that are contextual” (p. 15). For the purposes of the current research, two central contextual factors are examined below in detail, namely culture and society, due to their significance from a sociological perspective, as well as the lack of previous examination.

Different terminology has been used to describe the combined dimensions and systems that comprise the environment in which an individual exists. While context has been selected as the primary term in this research, it is worthwhile to examine three concepts closely related to context; *situation*, *lifeworld* and *habitus*.

Situation or *situations* is a term that has been commonly used to refer to the environment in which information behaviour occurs. Julien and Michels (2004) suggest that situation is broader than Dervin's (1983) "gaps" concept, "narrower than 'context' as defined in all the discussions of context arising from the Information Seeking in Context Conferences (ISIC) (held in 1996, 1998, 2000, 2002)" (p. 548). Julien and Michels (2004) also suggest that further research is required in order to discern between aspects of situation and aspects of personal characteristics such as personality are relevant to information behaviour, and how these characteristics vary across individuals (p. 548). To this end Julien and Michels (2004) conducted an investigation of "intra-individual" information behaviour that examined multiple information behaviour incidents within a single individual, and found that "analyzing a single individual's information behaviour can elucidate important aspects of information seeking" (p. 560). The data resulting from their study revealed that "the nature of the activity, time, motivation, location, and purpose for which information is required" were the most important aspects of the situation to affect daily information behaviour (Julien & Michels, 2004, p. 561). Julien and Michels (2004) went on to acknowledge that "none [of those aspects] has been fully explored to date in the context of daily life" (p. 562), a gap my research addresses.

The term *lifeworld* has also been used in information science, predominantly by Chatman (1996, 1999, 2000) and Wilson (2006). Wilson (2006) describes *lifeworld* in the information seeking behaviour context as "the totality of experiences centred upon the individual as an information user" (p. 661). For Habermas (1987), the lifeworld is the background in which socialisation and communication take place. Habermas conceptualised the lifeworld as the meeting place where individual actors communicate, and share their internal and subjective worlds, thus creating a socially constructed lifeworld (p. 127).

The concept of *habitus*, developed by French philosopher Pierre Bourdieu (Bourdieu & Nice, 1984), describes the same idea of a universe or environment in the broadest sense, yet places

additional emphasis on the cultural and social context of the individual. According to Bourdieu and Nice (1984), *habitus* is a “socially and culturally determined system of thinking, perception, and evaluation, internalized by the individual” (p. 170). This concept could be interpreted as the individual’s background to their competences, practices, and attitudes that affect the way in which the individual goes about his or her everyday life. These competences, practices, and attitudes are generally socially and culturally determined by the individuals’ personal context or *habitus*.

There are other ways to describe an individual’s context, such as *way of life* which was described by Finnish information science researcher Savolainen (1995) as the “order of things” in an individual’s life, including personal preferences, everyday choices, and values. These concepts essentially all describe the same central idea – the entirety of the elements that make up an individual’s way of life, in which every action he or she takes, every thought he or she has, is embedded. Research suggests that those elements related to the social and cultural dimensions of the way of life in which the individual is situated are central in influencing an individual’s choices, values, and decisions (Bourdieu & Nice, 1984).

2.3.2. Dimensions of context

There are numerous dimensions of context that affect how individuals interact with and perceive the world around them. While some dimensions of context, such as the physical environment, political system, or information resource base available, may play a significant role in how individuals interact with information, for this research I chose to emphasise how certain dimensions of context affect the cognitive behaviours involved with information behaviour at a largely sub-conscious level, as this area has largely remained unexplored by information science research to date.

A review of the literature revealed that the social and cultural dimensions of context potentially play a significant role in how individuals need, seek and use information. These dimensions of context have thus far received little investigation with regard to information behaviour in the literature, yet as demonstrated below, they may have serious implications for how individuals engage in information behaviour.

Aristotle may deserve credit as being the first to remark on the intertwined nature of the individual and his social environment with his maxim “Man is by nature a social animal” (“Quote by Aristotle: Man is by nature a social animal; an individual...,” n.d.). Aristotle is also credited as saying “society is something that precedes the individual”, asserting his belief that the social environment shapes man’s behaviour and cognition. While Aristotle may have accurately described his perception of the relationship between man and society, this is a contentious philosophical debate that people have struggled with for thousands of years. Burr (2003) describes a similar discussion of the mutually informing nature of the individual and society, an idea I explore in greater detail in section 3.1.2.

All individuals use information regularly in their lives, but, contemporary scholars such as Burr (2003), as well as Aristotle suggest that it is the individual’s social environment which precedes one as an individual information user. The physical context, as well as internal factors, are all influences in the individual’s information behaviour, and all shaped by the society and context that has preceded the individual.

An individual’s socio-cultural framework influences his or her perception of his or her context. Markus and Kitayama (1991) proposed “that for many cultures of the world, the Western notion of the self as an entity containing significant dispositional attributes, and as detached from context, is simply not an adequate description of selfhood” (p. 225). This conceptualisation of the self illustrates not only the diverse ways in which individuals may perceive themselves, but also the dynamic nature of how context is perceived.

2.3.3. Contextual factors: Society

The *Oxford English Dictionary Online* (Oxford University Press, n.d.) defines *society* as “the state or condition of living in company with other people; the system of customs and organization adopted by a group of people for harmonious coexistence or mutual benefit” (n.p.). This idea of “harmonious coexistence or mutual benefit” (Oxford University Press, n.d., n.p.) is important in understanding not only how societies have developed, but also the role social interaction has played in the development of humankind.

The study of human thought and behaviour is inextricably linked to the study of the individual's social environment. However, the term *society* may be perceived simply as an English language construct to describe something that is essentially intangible. For example, certain sociologists argue that there is no such thing as society: it is simply a convenient general term to describe phenomena beyond our comprehension, or phenomena which we cannot otherwise describe (Scott & Marshall, 2009).

To avoid ambiguity, for the purposes of the current research, the term *society* will continue to be used to describe the dominant or overarching system of values, customs, or culture shared by a group of individuals. The term *social group* is closely related to *cultural group*, as individuals may share similar linguistic, historical, and religious views. A social group may or may not reside wholly within the political boundaries of one nation or region, and may or may not be self-defined or recognised. An individual may or may not be conscious of belonging to any one society, yet most likely belongs to several. It is this intangible and often misunderstood nature of society which also presents problems for those who wish to study the core values and deeply embedded beliefs individual members possess.

When describing membership in a society, the terms *race* or *ethnicity* may arise. Despite being commonly used in the English language, both of these terms present challenges for objective or neutral usage to describe individuals in diverse contexts. The term *race* is generally used to describe individuals with shared biological or genetic material, though usage as such is the subject of contention, particularly among the scientific community (American Anthropological Association, 1998).

Often associated with race, but distinctly separate, is the notion of ethnicity. According to the *Oxford English Dictionary Online* (Oxford University Press, n.d.) *ethnicity* refers to shared cultural or linguistic heritage, and is not explicitly related to an individual's physical or biological heredity. It is important to bear these distinctions in mind when discussing cultural or social groups. The individual members of a social group may or may not have the same racial heritage, but they most likely share the same ethnic identity. An individual can therefore choose to identify with any ethnic group that he or she shares cultural values with (Scott & Marshall, 2009).

Cultural capital and social capital refer to an individual's non-physical assets. The term *cultural capital* was first articulated by Bourdieu in 1973, and can describe any non-physical asset, including intellectual capital or educational capital. Bourdieu conceptualised cultural capital as a *habitus*, or "an embodied socialized tendency or disposition to act, think, or feel in a particular way" (Scott & Marshall, 2009).

Social capital, on the other hand, refers to the resources produced through an individual's social networks, his or her socialisation with family members and peers throughout childhood, and through continued interaction with other individuals. Both of these concepts are important when investigating cultural and social factors affecting information behaviour.

This research investigates the role of society and culture in information behaviour, a topic not often discussed in the scholarly literature. Steinwachs (1999, p. 203) is one of the few scholars to examine the role of culture in information behaviour. Her 1999 paper "Information and culture: The impact of national culture on information processes" may be the first to explore the relationship between the dimensions of culture as identified by Geert Hofstede (1980) and information behaviour. Steinwachs (1999) related research in sociology and intercultural management to information systems in an attempt to "derive a theory about the impact of culture on the elements of the information system" (p. 203). Steinwachs's research has clear implications for further examination of the role of culture and society in information behaviour, however, the author failed to suggest any methods of applying her research. Steinwachs went on to suggest "as with all social theories, this will now have to be tested in practice. The first step would be to develop a methodology for practical field research, which would then have to be carried out in different cultures" (p. 203). One objective of my research was to develop a methodology similar to the one described by Steinwachs. Once the relationship between information behaviour and culture and society has been elaborated in different cultures, we can begin to understand the complex system of interactions between the individual's context and his or her information behaviour.

2.3.4. Contextual factors: Culture

The concept of culture is of critical importance when considering the contextual factors affecting information behaviour.

Culture has been defined as “all that in human society which is socially rather than biologically transmitted” (Scott & Marshall, 2009, n.p), and “all transmitted social knowledge” (Menou, 1983, p. 121). Bates and Plog (1990) describe culture as “a system of shared beliefs, values, customs, and behaviours that members of a society use to cope with their world and with one another, and that are transmitted from generation to generation through learning” (1990). These ways of understanding culture are based to a great extent on the ideas of Edward Tylor, who, in 1871, referred to culture as “a learned complex of knowledge, belief, art, morals, law, and custom” (Tylor, 1891 as cited in Scott & Marshall, 2009, n.p.). Scott and Marshall (2009) postulate that Tylor and other 19th-century anthropologists viewed culture as a conscious creation of human rationality, with the tendency to progress towards higher moral values as the culture evolved over time. Tylor and his fellow Victorian-era minds were thus able to rationalize colonialism throughout the world, through the development of a convenient hierarchy of cultures, at the top of which was European society (Scott & Marshall, 2009). These ideas soon gave way to principles of cultural relativism once the science of culture was further investigated.

Contemporary ideas of culture now tend towards relativism, or the idea that concepts are socially constructed and vary cross-culturally, and cannot be ranked or described hierarchically. Instead, recent research in cultural studies aims to describe, compare, and contrast cultures, without making value-based judgements suggesting certain cultures are better than others. According to sociological research “these concepts may include such fundamental notions as what is considered true, morally correct, and what constitutes knowledge or even reality itself” (Scott & Marshall, 2009). Research in disciplines such as information science can benefit from integrating sociological concepts, such as the subjective nature of reality, into their theoretical perspectives.

There are three levels at which analysis of culture takes place, according to cultural anthropologists. These levels are:

1. Learned patterns of behaviour;
2. Aspects of culture that act below conscious levels (such as the deep level of grammar and syntax in language, of which a native language speaker is seldom aware);

3. Patterns of thought and perception, which are also culturally determined.

Culture is collectively and collaboratively defined. In addition to being a collaborative product, it is manifested in many layers. These layers of culture are described by Cutler (2005) as “the cultural onion”. Cutler’s ideas of levels or layers to the cultural onion parallel the three levels in which cultural anthropologists conceptualize culture. Cutler’s method of conceptualizing culture as an “onion” is illustrated in Figure 9.

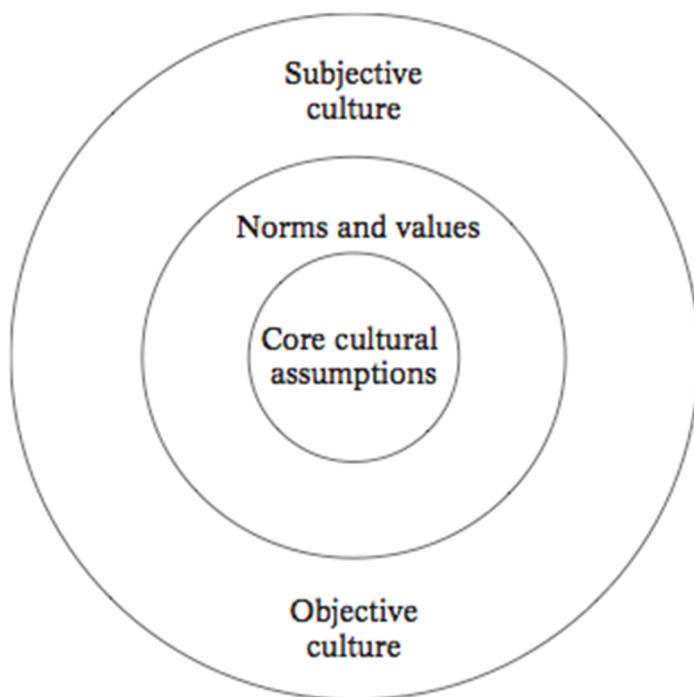


Figure 9 - Cutler’s cultural onion (Dorner & Gorman, 2006, p. 282, after Cutler, 2005, p. 75)

Cutler (2005, p. 76) asserts that individuals acquire, to a greater or lesser extent, the core assumptions of their groups without any conscious awareness of doing so. This assertion explains in part the lack of awareness of the subjective nature of reality in mainstream information behaviour research. As we aren’t necessarily even cognisant of our own core cultural values, awareness of alternative core cultural assumptions is even further beyond our comprehension.

Conceptualising culture as multi-layered and both subjective and objective, as described by Cutler above, played an important role in the development of my research.

Cutler's (2005) cultural onion, also has many parallels within the culturally relativistic perspective on human sociology, another conceptual framework that played a key role in the undertaking of the current research. Culturally relativistic research includes the work of Dutch sociologist Geert Hofstede (1980), who developed a series of dimensions of culture on which to compare and contrast values, perceptions, behaviours, and understandings throughout the world. Geert Hofstede's (1980) research is of seminal importance and supports the theories behind cultural relativism; namely that language constructs the world, and reality does not independently exist, but is shaped by cultural and linguistic influences. The socially constructed nature of reality is further explored in section 3.1.2. The lack of emphasis on cultural relativism present in most mainstream information behaviour models thus raises issues for application in non-Western contexts. According to Winch (1964), importing a Western rationalist approach is ethnocentric. Instead, research must aim to understand cultural patterns from an insider's point of view, only then will genuine understanding be attained. See section 8.4.2 for further discussion of insider/outsider status.

2.3.4.1. **Cultural dimensions**

Geert Hofstede was one of the first scholars to collect empirical evidence on the nature of culture on a global scale. This empirical evidence formed the basis of his development of a number of theories regarding cultural values, which have informed the interpretation of the data collected in this study. In addition, Geert Hofstede's (1980) findings provide a framework from which to better understand how and why certain contextual factors affect information behaviour in Laos.

Gaining an insider's understanding of culture by an outsider is difficult. Geert Hofstede attempted to do so by analysing the results of surveys administered to 116,000 employees of IBM Corporation in 70 different countries (Geert Hofstede, 1980). All of the participants answered the same questions, the principle difference being the language and country in which the survey was administered. Based on the responses, Geert Hofstede identified four dimensions of culture, which was later expanded to six (Geert Hofstede, 2010). Laos was not amongst one of the countries surveyed in Geert Hofstede's work. His typology for describing

variations in value orientations has been remarkably influential, though not universally praised. Critics and supporters alike of Geert Hofstede cannot deny the significance of his work.

The dimensions of culture identified by Geert Hofstede (1980) are:

1. Power Distance
2. Individualism and Collectivism
3. Masculinity vs. Feminism (Quantity vs. Quality)
4. Uncertainty Avoidance

These were later expanded to include:

5. Long Term Orientation
6. Indulgence vs. restraint (Geert Hofstede & Gert Hofstede, 2005)

Geert Hofstede's research has inspired and informed a great deal of latter intercultural research, most notably House et al. (2004) who described the publication of Geert Hofstede's findings in 1980 as "monumental" (p. xvi). Using Hofstede's research as a starting point, the Global Leadership Organizational Behavior Effectiveness Research Project (GLOBE study) (House, Hanges, Javidan, Dorfman, & Gupta, 2004) expanded upon the idea of dimensions of culture and identified additional dimensions such as "humane orientation" and "assertiveness" which they used to examine organisational behaviour in 62 different societies. The results of the GLOBE study, complemented by Geert Hofstede's findings, provide valuable insight into cultural attitudes and their implications.

Based on Geert Hofstede and Gert Hofstede's 2005 descriptions of these six dimensions and Dorner and Gorman's (2006) interpretations of the first five, we can summarise Geert Hofstede's dimensions of culture, also used by House et al. (2004), in the following table:

Table 8 – Geert Hofstede’s dimensions of culture

1. Power Distance	Power distance describes the extent to which individuals assume or tolerate an unequal distribution of power.
2. Uncertainty Avoidance	The degree of avoidance of uncertainties is indicative of a society’s tolerance for ambiguity.
3. Individualism	The extent to which a society promotes individualism or collectivism is culturally determined.
4. Masculinity	Qualities such as competitiveness and assertiveness are associated with Masculinity by Geert Hofstede, and qualities such as modesty and thoughtfulness are associated with femininity.
5. Long-Term Orientation	The subsequently added dimension of long-term orientation describes the tendency to orient oneself towards the long-term or short-term future.
6. Indulgence versus Restraint	The most recent addition to Geert Hofstede’s dimensions of culture, indulgence vs. restraint, describes a society’s tendency to permit relatively free fulfilment of natural human drives related to enjoying life and having fun, or restrain such impulses to gratify one’s appetites.

Other research in addition to Dorner and Gorman (2006) has also shown Geert Hofstede’s dimensions of culture to be illustrative of certain cultural characteristics of the nations investigated that can be linked to individual behaviours and perceptions. In a study conducted by Bagchi et al. (2004) the national cultural dimensions of Geert Hofstede were found to accurately predict the adoption of information communication technology in 31 countries they investigated. Gong, Li and Stump (2007) also found empirical evidence that suggested Geert Hofstede’s dimensions of culture are useful indicators of socio-cultural values affecting attitudes and behaviours.

The dimension of power distance is of particular significance to the research, as it has been suggested that power distance has a major influence on information behaviour. High power distance societies tend to control information strictly, and access to information resources is limited (Carl, Gupta, & Javidan, 2004). Research by Khalil and Seleim (2010) also found that “low power distance societies are more supportive of the adoption of tools and means that extend a society's information dissemination capacity” (p. 131).

According to Carl et al. (2004) “a society's predominant belief system and its religion or philosophy will have the most profound and enduring influence on power distance” (p. 526). Therefore the cultural dimension of power distance and the degree of tolerance of inequality within Lao society is influenced by the predominantly Buddhist belief system. However, Carl et al. (2004) also suggest that “regardless of the religion, any society that has neither a democratic tradition nor an established middle class will have a relatively high level of power distance” (p. 526). This assertion regarding power distance values and correlation of social factors corresponds to the expected values for Laos put forth by Dorner and Gorman (2011) which emphasised the dimension of power distance “for which Laos scores show the most difference” (n.p.) compared to those of Western cultures including New Zealand and Canada. Using a formula averaging Geert Hofstede's scores identified for Thailand and Vietnam, two countries which have historically exerted a great deal of influence on Laos, Dorner and Gorman (2011) suggested that Laos scores highly on the power distance dimension.

For this reason, it is likely that certain information behaviours are influenced by the dimensions of culture outlined above. Geert Hofstede's research provides a unique and valuable reference point from which to explore the link between culture and information behaviour. The relationship between contextual factors such as culture, informed by Geert Hofstede's empirical evidence for cultural dimensions, and information behaviour, are explored in the discussion, chapter 6.

2.3.4.2. Criticism of Geert Hofstede

Numerous criticisms of Geert Hofstede's work have arisen over the years, most of which have been personally addressed by Geert Hofstede. Inevitably, the critique arose that Geert Hofstede's model was developed from a Western cultural perspective and exhibits the biases of

this culture (Komlodi, 2005). Eliminating this bias would be almost impossible, as all research must take place within a social, cultural, and historical context (Ailon, 2008). Ferguson (1994) suggested that despite attempts at cultural relativism, organizational studies such as the one conducted by Geert Hofstede are “implicitly male/masculine, white/western, and bourgeois/managerial” (p. 89). Ferguson (1994) also concluded that this implicit male, western, bourgeois perspective is the dominant theme in all contemporary research, and calls for increased “contrasting perspectives offered by women, working-class people and people of colour” (p. 82). Ferguson’s (1994) theory of the dominance of white, middle and upper class males in academia is supported by anecdotal evidence. An example of this implicit Western perspective is identified by Ailon (2008) who suggested that the identification of countries as *developing* versus *developed* using indicators that attribute positive scores to Western values implicitly supports a “scheme of international inequality” (p. 898). See section 2.5 for further consideration of the term *developing country*.

Some critics of Geert Hofstede have suggested that he neglects to take into account regional variations in cultural practise, and instead assumes that the values he identified in each country are representative of all inhabitants of said country. However, Geert Hofstede explicitly rejects the idea of a uniform national culture in the first chapter of “*Culture’s consequences*” (2001). My research has intentionally limited itself to investigating members of the ethnic majority in a single region in order to minimise the potential for variations in cultural values.

Despite these critiques, the robustness of Geert Hofstede’s work is such that it continues to be used in multiple disciplines, and is certainly suitable for the purposes of my research, even with these criticisms taken into consideration.

2.3.4.3. Implications of Geert Hofstede’s work for the study

The dimensions of culture identified by Geert Hofstede permitted me to examine contextual factors that otherwise would be immeasurable. For this reason, Geert Hofstede’s research has informed the development of my research, and the interpretation of the data as mentioned above.

Using Dorner and Gorman's (2011, n.p.) estimated values, the following inferences can be made about the cultural dimensions of Laos:

- High power distance value
- Low individuality value
- Moderate masculinity value
- Moderate uncertainty avoidance value

The implications of these estimated values with regard to information behaviour are discussed in greater detail with regard to the interpretation of the data in the discussion chapter.

However, high power distance and low individuality may have relevant implications on information practice that are worthwhile to note. In particular, high power distance values indicate that inequality is tolerated, and respect for superiors is mandatory (Geert Hofstede & Gert Hofstede, 2005). A low individuality score would indicate that collectivism is highly valued. According to Geert Hofstede & Gert Hofstede (2005) *collectivism* is defined as

The opposite of individualism; together, they form one of the dimensions of national cultures. Collectivism stands for a society in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty. (p. 399)

Collectivist societies encourage harmony and cohesiveness within the society, discouraging conflict, discord, and critical analysis (Geert Hofstede & Gert Hofstede, 2005). These two dimensions have clear implications on how individuals may interact with information. The nature of how these cultural factors influence information behaviour in Laos was one of the focuses of this research, and is explored in section 7.2.1.

2.3.5. Contextual factors: Quality of life

Quality of life, or "subjective well-being" is an important component of context, as the two are mutually informing and interdependent. As mentioned in section 1.6, one motivation for conducting this research was to provide a basis or starting point from which further exploration of the relationship between information behaviour and quality of life could be explored. A

contextualised understanding of information behaviour provides insight into information practices, thereby potentially making it possible for individuals to develop more effective ways of interacting with information to suit their local conditions, which may in turn enable the individual to address information needs with greater success. Increased ability to resolve basic information needs may enable individuals to address more complex needs, impacting their quality of life. However, thus far, there has been little research examining the relationship between information behaviour and quality of life.

An understanding of existing research into the role of quality of life in how people need, seek and use information provides some useful insights to my research, as further investigation into this relationship is one of my intended future research directions.

There are numerous ways to assess an individual's quality of life. It can be expressed quantitatively, as evidenced by the number of indices used in international development to ascertain levels of development around the world, primarily based on objective and quantifiable data, such as Gross Domestic Product (GDP), average life span, average level of education, etc. Standard indicators of quality of life include wealth and employment, as well the built environment, physical and mental health, education, recreation and leisure time, and social belonging (Gregory, Johnston, & Pratt, 2009). These indicators are often very closely tied with the resolution of basic human needs; for example, sufficient financial resources permit individuals to have sufficient access to food, shelter, and healthcare, satisfying the most basic levels of human needs.

However, the concept of *subjective well-being* is now also seen as a valid indicator of quality of life according to Veenhoven (2005). Subjective well-being or "subjective life-satisfaction" endeavours to quantify individuals' perceived levels of well-being, and purports to measure happiness, an important dimension of quality of life not factored into most standard measures (Veenhoven, 2005). Of course, the ambiguous nature of attempting to measure self-reported happiness means that it cannot be isolated from variables such as culture and values, and therefore is impossible to accurately and objectively develop a precise, explicit "ranking" of happiness on a global scale, despite this task having been attempted, most notably by the New Economics Foundation (2010), and its "Happy Planet Index".

Traditional indicators of development, in particular indices such as the GDP and Human Development Index (HDI), are not accurate measures of happiness or quality of life, as wealth does not always correlate with happiness, as evidenced by what is known as the “Easterlin Paradox”, a study that found increases in personal wealth did not universally indicate an increase in subjective well-being (Easterlin, 1995; Layard, 2005; Veenhoven, 2005). Research has shown that after a certain threshold has been reached, an increase in income does not necessarily signify an increase in happiness (Easterlin, 1995; Layard, 2005; Veenhoven, 2005).

According to Layard (2005), “the fact is that, despite massive increases in purchasing power, people in the West are no happier than they were fifty years ago” (Layard, 2005, p. 1). This claim supports the well-known adage that money can’t buy happiness.

Layard (2005, p. 1) also goes on to explain that the happiness we get from what we have is largely culturally determined. When basic human needs are resolved, the quality of life improves. These needs, which in turn inform information seeking behaviour, are dictated by the cultural context of the individual according to Layard. Layard suggests that the formation of tastes, something chiefly influenced by the social and cultural environment of one’s upbringing, must be taken into account (p. 8). These tastes or preferences influence one’s basic needs. No matter what one’s tastes are, if they are hungry they need food. They may choose to fulfil their need with *padec* (Lao fermented fish paste) or Stilton cheese, and often whether or not these needs are fulfilled is the result of information behaviour.

Nevertheless, indicators such as GDP, health, and education are still crucial factors in determining an individual’s quality of life. The quality of life experienced by an individual also influences his or her basic needs in a dynamic cycle of needs, similar to the cycle of needs expressed in Figure 1 (p. 3). Savolainen (1995) uses the term *mastery of life* as *keeping things in order*; and identifies four ideal types of mastery of life with their implications for ELIS, namely optimistic-cognitive, pessimistic-cognitive, defensive-affective and pessimistic-affective mastery of life. Savolainen’s (1995) concept of *mastery of life* is somewhat similar to the quality of life concept, often used in the context of international development.

2.3.6. Summary of context

While diverse ways of defining or understanding context exist throughout the literature, section 2.3 of this thesis has outlined some of the salient dimensions of context for the purposes of the study. This discussion does not intend to be a comprehensive analysis of the meaning of context throughout the social sciences, but rather to provide a framework for understanding context and its role in information science research in developing countries. For this reason, three primary dimensions of context, namely culture, society, and quality of life, have been examined in greater detail. The literature described above has identified these contextual factors as potentially playing significant roles in determining individual information behaviour. While contextual factors such as physical, political, or economic environments are certainly critical dimensions of context, the social and cultural dimensions hold the greatest interest. The salient literature relevant to this investigation has been discussed above, however, several significant propositions deserve reiteration:

- Context is dynamic, experienced and influenced individually and internally, shifting over time.
- Social and cultural environments precede individuals and therefore exert significant influence on individual perception and understanding of reality.
- Individuals acquire the core assumptions of their social and cultural groups without any conscious awareness of doing so.
- Happiness, also known as subjective well-being or individual perception of quality of life is largely determined by social and cultural values as well as economic or financial indicators.

These understandings have informed the development of this study, including the analysis of the literature, development of the methodology, data collection, analysis, and interpretation.

2.4. Context and information behaviour

Information behaviour does not occur in a vacuum, but rather, is contextually responsive and arises due to some history, purpose, or influence (Case, 2012, p. 226). Investigation into context by researchers in information science has thus far been limited, despite widespread recognition

of the central role of context in information behaviour. According to Pettigrew (1999) "when Brenda Dervin asked, in her keynote address at the 1996 ISIC Conference, 'what is context?' she added that the question was not addressed or operationalized in any of the papers presented" (p. 802).

Pettigrew (1999) further described context, suggesting "the notion of context may prove as indefinable or perhaps uncontainable as 'information' or even 'information need'" (p. 810). The intangible nature of context may be one reason why it remains relatively un-examined. Based on Dervin's interpretation of context in response to the lack of operationalization at the ISIC conference, Pettigrew (1999) suggested that "context can be defined along multiple lines and like any sociological phenomena, appears at its richest when studied or considered in multiple ways" (p. 802). These "multiple-ways" may include consideration for the social, cultural, and experiential context upon which this research is focussed, in addition to physical, political, and economic contexts, and understanding of the intertwined nature of all contextual factors with one another. This conceptualisation of context as something multi-faceted, dynamic, and holistic is the perspective taken by this research.

Kuhlthau (1999) suggested that to neglect context in information science "is to ignore the basic motivations and impetus that drives the user in the information seeking process" (p. 10). Yet, in many studies of information behaviour, context remains undefined or unmentioned. As discussed in the introduction, Cox (2012) suggested that "all social practices involve information use, creation and seeking" (p. 185). However, Cox goes on to argue that for these social practices involving information to be information practices, they must be specifically information orientated. Tuominen and Savolainen (1997) define information as "a communicative construct which is produced in a social context" (p. 89), emphasizing both the communicative and social aspects of information behaviour. They go on to suggest an understanding of the contextual nature of information means that the ways in which individuals construct information depends on the interactive nature of language, as well as on the "pragmatic social purposes" the information is intended to address (Tuominen & Savolainen, 1997, p. 89). For this reason, and others discussed in section 3.3.4.1, discourse analysis emerges as a potentially robust tool for investigating contextual dimensions of information behaviour.

While Dervin (1997) praised emphasis in information research on the individual rather than the information system or information itself, she suggested increased emphasis on the “individual in context”. She also suggested that a “contextual view mandates a new way of being as scholar and researcher” (1997, p. 32). While I have acknowledged and conceptualised context as dynamic and both internal and external, the objective of this research was not to identify contextual shifts over time. For this reason, the contextual factors identified in this research are understood to be dimensions of the current or present context, part of a dynamic continuum of past, present, and future contexts.

Case (2012) considered context to be central to the transfer of information (p. 289). Case (2012) reported that people strive toward a holistic view of their world, and therefore, may not connect external information to their internal reality. This disconnect may be because of anxiety, or because individuals do not perceive the relevance of the information to their reality (Case, 2012 p. 289). Case (2012 p. 289) suggested that the individual’s perception of the situation will shape his or her needs as much as the explicit context of the situation. For this reason, much of how individuals create meaning from information is a result not only of the information itself, but also “accumulated personal experiences and second hand experiences, including [an individual’s] understanding of the world and language” (p. 289).

Essentially, the dominant argument featured throughout research into context and information behaviour underscores the importance of conceptualising context as not only being something external, but also something internal. Therefore, the individual’s perception of his or her context is also affected by the context itself and the prior experiences of that individual. Current models of information behaviour rarely emphasise the individual-in-context, but rather aim to be universal, despite being developed and applied from an inherently Western perspective. Therefore, my research has aimed to gain an understanding of the contextual factors that most affect information behaviour, and how they affect the information behaviour of the individual-in-context.

2.5. The context of Laos

An overview of the Lao context was essential in developing an appropriate research strategy. For this reason, relevant literature regarding the context of Laos was examined to develop an in-

depth understanding of the local conditions, including the history, culture, and demographics of the country.

Laos or the Lao People's Democratic Republic (Lao PDR), a country located in South-East Asia, within the Greater Mekong Subregion (GMS), is home to six and a half million inhabitants ("Laos," n.d.). Laos is ranked 138 out of 186 countries listed in the United Nations Human Development Index (2012), at the lower end of the UN's ranking system that measures international development.

Individuals with Lao nationality may belong to a number of different ethnic groups or tribes; however, nearly 60% of the population belong to the Lao Loum ethnic group (Central Intelligence Agency [CIA], 2011). Certain contextual factors, such as the centralised system of government and education, the use of the Lao language, and the national religion of Buddhism are fairly uniform throughout Laos, despite the existence of numerous ethnic groups. Individuals belonging to ethnic minorities tend to reside in rural areas and smaller communities outside the developed areas. As this research intended to investigate information behaviour amongst one particular society, I examined the information behaviour of individuals residing in and around Vientiane, Laos. Consequently, all the participants were members of the ethnic majority, Lao Loum.

The terms *developing country* and *non-Western society* are both used throughout this thesis with regard to Laos, yet require some clarification. These terms have quite different meanings, and have not been used interchangeably. In particular, use of the term *developing country* in this research is not without caveats. For lack of an acceptable alternative, *developing country* has been used to describe countries that have not developed economically to the same extent as some more developed countries, such as nations with OECD (Organisation for Economic Co-operation and Development) membership. However, use of this term does not imply inferiority to more developed countries. There is neither a standard definition of a *developing country*, nor any specific statistical indicator threshold or rankings to determine if a country is developed or developing. Nevertheless, the term *developing country* has entered common usage to describe countries with lower economic development levels. *Developing country* has no explicit geographical or cultural connotations, but refers merely to economic development. Designation

as such is often based on economic indicators such as gross domestic product and/or per capita income levels.

On the other hand, *non-Western society* can refer to any society that does not possess a dominant core value system originating in any of the Western European cultures. This term can include countries that are highly developed economically, such as South Korea, Singapore, and Japan, as well as many developing countries throughout the world. Laos is considered to be both a non-Western society, and a developing country.

Learner-centred educational approaches have been a part of the Lao curriculum since 2001 (Sisavanh, 2001), and with support from international organisations information literacy education has been taught in Laos since 2008 (Dorner & Gorman, 2011). These strategies are perhaps evidence of a larger move in Lao policy to modernize, develop, and integrate into the global marketplace, after years of political and economic isolation. Assistance from external organizations, such as IFLA, UNESCO, etc., have been instrumental in improving educational opportunities for Laotians; however, the efficacy of these grant-funded programs has yet to be determined. Little research has been conducted on the outcomes of information literacy education in GMS countries, or the information behaviour of Lao people. Therefore, we don't know how individuals in GMS countries such as Lao PDR identify and address their information needs, or which factors influence the resolution of information needs. The CIA World Factbook Website (2013) provides the following data about Laos:

- Population: 6,695,166 (July 2013 est.)
- Population by age:
 - 0-14 years: 35.5% (male 1,198,288/female 1,178,180)
 - 15-24 years: 21.3% (male 706,679/female 716,368)
 - 25-54 years: 34.6% (male 1,143,265/female 1,174,102)
 - 55-64 years: 4.9% (male 160,650/female 166,605)
 - 65 years and over: 3.7% (male 113,301/female 137,728) (2013 est.)
- Government type:
 - Communist state
- Major urban centres:

- Vientiane (capital) 799,000 population (2009)
- Ethnic groups
 - Lao 55%, Khmou 11%, Hmong 8%, other (over 100 minor ethnic groups) 26% (2005 census)
- Religions
 - Buddhist 67%, Christian 1.5%, other and unspecified 31.5% (2005 census)
- Languages:
 - Lao (official), French, English, and various ethnic languages
- Literacy (definition: age 15 and over can read and write):
 - total population: 73%
 - male: 83%
 - female: 63% (2005 Census)

(CIA, 2013)

Laos is geographically considered part of Southeast Asia, and historically consisted of a monarchy ruled by a series of dynasties of Lao kings, with the royal seat situated in Luang Prabang (Pholsena, 2006). Laos was colonised by the French from the 17th century, and was considerably influenced by French culture along with Vietnam and Cambodia as part of French “Indochina” until the mid 20th-century (Pholsena, 2006). A Lao nationalist movement resulted in independence from France in 1945, however Lao people continued to experience violence due international conflicts throughout the region, such as the Vietnam/American war in the 1960’s and 70’s , and a long civil war within Laos itself (Holt, 2009; Pholsena, 2006). Despite considerable assistance from American “imperialist” forces aiming to stop the spread of communism in the region, those loyal to the monarchy were defeated by the pro-communist *Pathet Lao*, who formed the Lao People’s Revolutionary Party to govern the country in 1975 (Holt, 2009; Pholsena, 2006).

The Central Intelligence Agency (CIA) World Factbook (2013) describes the government of Laos as “one of the few remaining one-party communist states” (n.p.) which has been controlled exclusively by the Lao People’s Revolutionary Party (LPRP) since 1975. Until recently the government of Laos remained fundamentally Marxist in their economic policy, resulting in very

little interaction with free-market economies such as the OECD nations. Since the time of its independence Laos has had close economic ties with other socialist nations, such as the USSR. However, the LPRP has shifted away from a traditional socialist economy, encouraging decentralisation and private enterprise since the late 1980's, resulting in consistent economic growth, exceeding 7% per year during 2008-12 (CIA, 2013).

According to Morev (2002),

This change of direction in the country's social and economic development involved the transition from a socialist to a market economy; the opening up of the country to the outside world and the resulting influx of new lifestyles and Western mass culture had a devastating effect on traditional ways of life and on Lao national culture in general. (p. 395)

The extent of the impact of these new economic policies upon Lao national cultural and traditional ways of life are difficult to measure definitively, and Morev's (2002) comments may be sensationalising the extent of the effect of Western culture on traditional ways of life in Laos. Nevertheless Morev (2002) does draw attention to an issue facing many developing nations as they embrace modernisation and the global knowledge economy.

Laos's one party system that has been in power for most of the living population's memory has influenced the Lao people's identities and their social and cultural values. Of particular significance is the designation and implementation of Buddhism as the state religion (Pholsena, 2006), and the role of religion in Lao people's everyday information behaviour. An understanding of the historical and religious contexts of Laos framed the development of the current research project. A number of recent monographs, including *Spirits of the Place* by John Holt (2009) and *Post-War Laos* by Vatthana Pholsena (2006) provide comprehensive and well-researched accounts of varying aspects of Lao history and culture.

Presently, Laos has a basic, but improving, road system, and limited external and internal land-line telecommunications (CIA, 2013, n.p.). Economic growth has reduced official poverty rates from 46% in 1992 to 26% in 2010 (CIA, 2013, n.p.). Foreign direct investment in hydropower, copper and gold mining, logging, and construction has benefitted the economy, though some projects in these industries have drawn criticism for their environmental impacts (CIA, 2013).

Laos's primary trading partners, for both imports and exports, are Thailand, China and Vietnam (CIA, 2013).

These details provide a general overview of the Lao context in which this research was undertaken. My personal experiences and contacts within the country also provided additional support for the selection of Laos as the region in which to investigate information behaviour. From 2009 to 2010 I acted as a technical advisor in information literacy to the Central Library of the National University of Laos. In addition, Laos is a relatively small country for the ASEAN region, with only one large urban centre with a population over 60,000, and a relatively uniform national culture amongst the dominant ethnic group, the Lao Loum, to which more than 60% of the population belongs. Despite avoiding pervasive Westernisation and maintaining unique social and cultural values in the 20th century, Lao society is not impenetrable, and Lao educational institutions are supportive of research endeavours within their country. For these reasons Laos provided a unique setting suitable for examination within the region.

2.5.1. The technological landscape of Laos

The Institute of Southeast Asian studies investigated ICT adoption in the Southeast Asian region in 2003, and found "high levels of inequality with regard to ICT infrastructure and provision, as well as relatively high regulatory barriers to integration" (Coe, 2003, p. 314). According to Coe (2003, p. 314), Singapore, as an ICT hub for Asia-Pacific with highly advanced communications networks represents one extreme. Coe (2003) suggests that "at the other extreme, the region encompasses economies such as Laos, Myanmar, and Cambodia, with some of the lowest levels of ICT penetration in the world" (p. 314). Significant regional disparity continues to exist, with approximately 0.2% of the population subscribed to fixed broadband Internet in Lao PDR in 2010, against 25% in Singapore (Organization For Economic Cooperation And Development [OECD], 2013, p. 269).

According to the Southeast Asian Economic Outlook (OECD, 2013) the entire region has experienced "recent major improvements in ICT infrastructure" (2013, p. 268). The study found that "ASEAN (Association of Southeast Asian Nations) countries, and especially the CLMV (Cambodia, Laos, Myanmar & Vietnam) economies and in rural areas, continue to face

challenges of extended coverage and access to fixed and wireless telephone and Internet connections (OECD, 2013, p. 268).

In 2003 Laos had 0.3 internet users per 100 people (The World Bank [TWB], n.d.). This number jumped to 9.0 users per 100 inhabitants in 2011, representing a 29-fold increase (TWB, n.d.). While still lower than some neighbouring countries, the percentage increase experienced in Laos was higher than that of other CLMV nations. Vietnam's access numbers, while much higher, only increased by 8-fold during the same period (The World Bank, n.d.). In Cambodia ICT access rates increased by slightly more than 9-fold from 2003 to 2011, and currently only 3.1 people out of 100 have access to the internet (TWB, n.d.). Internet access rates across the CLMV nations are placed to continue expanding rapidly, and the implications for this increased access are significant, in particular for information behaviour.

It is important to keep in mind that the Lao language has a unique written script, and due to the relatively small proportion of Lao speakers, very little online content is produced in the Lao language. Figures put the amount of online content in the Lao language at less than .1 % of all websites (W3Techs, n.d.). One can assume, for the most part, if a Lao person describes accessing the Internet, he or she has consulted resources in either the Thai language, or English. Participants may also access sites in other language such as Vietnamese, and French, though to a much smaller degree. Thai and Lao have similar alphabets and most literate Lao people can read Thai without difficulty. The Thai language accounts for .3% of internet content, and English accounts for 56.8% (W3Techs, n.d.).

The current research aimed to explore information behaviour in Laos, and understand how the changing information technology landscape is affecting how people interacted with information. The research methods and findings are examined in the following sections.

2.6. Summary of literature review

The scholarly literature not only sets the precedent for further research, but it provides a foundation upon which future research can be built. The literature I consulted for this review informed the development of this research dramatically and dynamically. Through examination of the literature, I developed an understanding of the complex relationships between human

information behaviour, cognition, context, and quality of life. This analysis of the literature has reiterated the interdependent nature of the relationships between each of these systems, mutually informing each other and in turn adapting to the influence of other systems. My analysis of the literature has also made possible the development of a conceptualisation of the previously mentioned systems and their relationships with each other, which may be contextualised to provide an increased understanding of information behaviour in developing countries. The salient points discussed in the literature review can be summarised in the following points:

- Context is dynamic, experienced and influenced individually and internally, shifting over time.
- Society and culture may be the most influential dimensions of context with regard to information behaviour.
- Multiple cognitive processes are involved in information behaviour.
- Cognitive patterns are pluralistic; cultural factors influence how individuals perceive, think, reason, and make decisions.
- Information behaviour, information practices, and information literacy are inter-related concepts that describe how individuals interact with information.

The application of the concepts that have emerged from the literature are discussed in the following chapter.

Chapter 3 **Research methodology**

In this chapter I provide an overview of the methodology employed in my research. I describe my research paradigm, as well as the research design and research methods.

A variety of potential research methodologies were investigated for their ability to identify the manifest and embedded contextual factors influencing information behaviour. As this research seeks to interpret and understand how and why people do things in the manner they do, an interpretive, qualitative, exploratory approach was selected.

3.1. Research paradigm

In the following section I describe the research paradigm that has guided the development of this research. The ontological and epistemological stances selected for use in this research were greatly influenced by the social constructionist theoretical perspective which insists that we take a critical stance toward our taken-for-granted ways of understanding the world, including ourselves (Burr, 2007, pp. 2-3). Burr describes the social constructionist viewpoint as considering the interaction and communication between people in the course of their everyday lives to be “the practices during which our shared versions of knowledge are constructed” (p. 4).

The ontological and epistemological stances of the research are explained in the following section. A detailed exploration of the methodology is given in section 3.2. Combined, these perspectives comprise the research paradigm that has directed the development of the research, and the research design.

3.1.1. Ontological and epistemological stance

This section explores the stance taken in this research regarding the nature of reality, and the relationship between the researcher and the phenomenon under investigation. These perspectives have been strongly influenced by social constructionism (see section 3.1.2). According to Lincoln and Denzin (2005) the ontological dimension of the research paradigm is “the nature of reality and the nature of the human being in the world” (p. 183). They contend that the epistemological dimension of the research paradigm is “the relationship between the

inquirer and the known" (p. 183). My research takes a relativistic ontological stance and an interpretivist epistemological stance. For Lincoln and Guba, constructionism is based upon a relativistic ontology, and a subjectivist epistemology (p. 193). Subjectivism and interpretivism are closely related concepts; both of which rely on the implicit assumption that there is no universal truth. Lincoln and Guba's conceptualisation of constructionism is similar to that of social constructionism, discussed in the greater detail in the following section. Lincoln and Guba also provide criteria for assessing research quality specific to constructionism (See section 8.3).

Dervin's SMM also supported my selection of a relativist ontology and an interpretivist epistemology. According to Dervin (1999), in sense-making, "the real is always potentially subject to multiple interpretations, due to changes in reality across space, changes across time, differences in how humans see reality arising from their differing anchorings in time-space; and differences in how humans construct interpretive bridges over a gappy reality" (p. 731). These core assumptions regarding the nature of reality and knowledge that underpin sense-making research have similar parallels within the philosophical foundations of social constructionism (See section 3.1.2).

In addition, SMM recognises that the informant is not simply a participant in a research project, but contributes to the research itself, and produces information in dialogue with the researchers. This conceptualisation of the relationship between the researcher and the participants informs my research paradigm. According to Dervin (1999) "SMM from the beginning has mandated itself to the design of methodology for the communicative study of communication"(p. 729). Dervin (1999) emphasised that "information seeking and use are defined as communicative practices" (p. 729). Dervin argued that the practices of researching information needs and seeking are also communicative practices, and produced collaboratively amongst researchers and participants. In this sense, both the researchers and participants can claim ownership over the research and its outcomes. Conceptualising the researcher and the participants as such supports a relativist ontology and interpretive epistemology.

Qualitative research is commonly used in information science, and there exists a great deal of support for the use of an interpretivist epistemology within a qualitative framework among information science researchers. Hjørland (2002) supported the use of what he called the *socio-*

cognitive perspective in information science. The origins of the socio-cognitive perspective lie within interpretive or hermeneutic approaches to research. Hjørland (2002) discussed the relevance of such epistemologies to the study of information science and application within information retrieval research, extolling the overall benefits of an epistemology emphasizing the social aspects of cognition in opposition to a positivistic approach (p. 263).

3.1.2. Social constructionism

The ontological and epistemological stances mentioned in the previous section have been greatly influenced by social constructionism. This section explores the nature of social constructionism, and how it has informed the development of this research.

Marton and Booth (1997) argued that the term *social constructivism* is ideal as an “umbrella term for a rather diverse set of research orientations that have in common an emphasis on what surrounds the individual, focusing on relations between individuals, groups, communities, situations, practices, language, culture, and society” (p. 11). Rather than assuming cognition occurs within an isolated individual, independent from historical or cultural contexts, the key tenets of social constructionism identify factors such as social processes, history, and culture that play important roles in perception, understanding, and the development of individual values and thoughts. In addition to taking into account the crucial nature of social context, for social constructionist theory the cultural, traditional, political and historical contexts are also fundamental to understanding information practice according to Holland (2006).

Social constructionists aim to study cognition and behaviour from a relativistic perspective, taking into account these contextual factors. Raskin (2002), posited that “social constructionists take issue with the traditional, Western individualism” (n.p.), an often unrecognised inherent feature of many epistemological stances. Furthermore, social constructionists are reluctant to favour knowledge developed in one context over knowledge developed in another, which makes it a more relativistic perspective (Raskin, 2002). This lack of preference for Western knowledge parallels my aim to gain an objective understanding of information behaviour in a developing country, independent of the influence of Western models of information behaviour.

Social constructionism in information science promotes the concept that information practice, though individually manifested, is not the sole product of one individual, but is in fact the product of the social environment, in conjunction with internal, individual components. This emphasis on the social construction of knowledge, understanding, and perception suits research that aims to explore the contextual factors that influence information practice.

The social constructionist perspective initially arose from research into the sociology of knowledge, most notably Berger and Luckmann's *The Social Construction of Reality* (1966), one of the first publications to put forth the idea that the social environment plays a critical role in the construction of meaning and experience among individuals. These authors asserted the interdependent nature of the individual and his or her social environment with the following statement: "Man's specific humanity and his sociality are inextricably intertwined. *Homo sapiens* is always, and in the same measure, *homo socius*" (p. 49). As I am exploring the understandings of information and context among individuals in Laos, it is essential to bear in mind that these understandings are socially constructed.

The emphasis on local and specific constructed and co-constructed realities present in social constructionist research corresponds to Lincoln and Guba's (2005) description of constructionism and a relativistic ontology (p. 193). In addition, the underlying assumptions of social constructionism support relativism and interpretivism, the ontology and epistemology underlying the research paradigm selected for this study.

Burr (2003) identified the social construction of reality by suggesting that "as a culture or society we construct our own versions of reality between us" (p. 6). According to Burr, "[o]ur ways of understanding the world do not come from objective reality, but from other people, both past and present" (p. 7), thereby endorsing both the social and historical dimensions of thought. Burr provided additional evidence for the social construction of reality by describing the human condition of being born into a world where conceptual frameworks and categories used by the people in our culture already exist. Our understanding of reality is based on these conceptual frameworks that pre-exist the formation of our individual thoughts.

While social constructionist orientations often logically lead to the use of qualitative research methods, it is a "mistake to suggest that there are particular research methods that are

intrinsically social constructionist" (Burr, 2003, p. 24). However, the value placed upon context and discourse often provides incentive for the use of research tools that also involves discourse and discussion. A range of research and analysis methods has been developed over time to accommodate this theoretical perspective, including discourse analysis (Burr, 2003), which was a method used to analyse the data in this study. Data analysis is discussed in section 3.3.2.

3.1.3. Social constructionism in information science

Social constructionism focuses on interaction and language in diverse contexts unlike traditional information behaviour research, often conducted within the framework of cognitivism. Cognitivist research in information behaviour generally emphasises the individual, at the expense of context. On the other hand, social constructionism maintains that context is critical, an understanding, which, according to Holland (2006), is crucial to investigating information practice.

A great deal of research, particularly within psychology, aims to isolate the individual or the individual behaviour from external factors. However, it is the intertwined nature of behaviour and these other variables that is of particular interest to social constructionists. The individual does not exist in a vacuum, and these contextual influences are not "extraneous variables" that must be "controlled for", a common feature of positivist research.

According to Tuominen, Talja and Savolainen (2005), the social constructionist perspective in information studies "provides a dialogic viewpoint to study the assumptions and implicit theories that people draw on when they engage in information practices and produce accounts of them"(p. 328). Tuominen et al. (2005) suggested that the dialogue amongst individuals informs assumptions and implicit understandings upon which the individual manifestations of information practices are based. They called such research "discursive information research (DIR)", and suggested that DIR aims at "capturing the socially and culturally shaped ways of understanding information practices" (p. 328). Information practices, according to Tuominen et al., includes the ways in which individuals seek, access, create, use, and share information. The social constructionist viewpoint is one of the few being used in information science that articulates the critical understanding of the social nature of human practices.

Research conducted by Hamer (2003) into the information behaviour of gay adolescents in North America also employed a social constructionist perspective. Hamer's (2003) emphasis on the socially constructed nature of self-identification as a homosexual provided evidence for Hamer's view of the central role of information-seeking behaviour in the construction of an individual's identity. According to Hamer (2003) "one may navigate identity creation by pursuing information needs" (p. 74). In the case of gay youths, Hamer (2003) suggested that "an individual constructs [his or her identity] by using social and cultural resources to make meaning from this experience" (p. 74). Hamer's (2003) argument regarding the social construction of the gay identity could apply to multiple other identity constructs found throughout the world. Hamer (2003) also suggested that "Berger and Luckmann's (1966) theory on the social construction of reality locates the origin of identity in the interplay between an individual and society" (p. 74). My research has aimed to investigate information behaviour as a product of both the individual and his or her socio-cultural context.

3.1.4. Social constructionism in other disciplines

Research and practice in education and pedagogy is increasingly emphasising the role of culture in learning, which is socially defined and contextually dependant. Marton and Booth (1997) recommend the use of a social constructionist orientation when conducting educational research in diverse circumstances, including cross-cultural research.

Social constructionism is also a perspective from which a great deal of sociology, cultural anthropology, and ethnography research has been conducted. Winch (1964) provides an argument for the social construction of reality based on the prevailing discourse of a society, using the common acceptance of witchcraft among the Azande people of Africa to illustrate the subjective nature of understanding. The reality experienced by the Azande people includes daily occurrences of witchcraft, beliefs and practices that are neither shared nor understood by most Westerners. Therefore, cultural relativists reject theories that aim to be universal, such as the rationalist ideas behind functionalism and Marxism (Scott & Marshall, 2009). This perspective closely parallels that of social constructionism.

3.1.5. Criticisms of social constructionism

Raskin (2002) pointed out several concerns that may arise when conducting research from the social constructionist perspective. Social constructionism has been criticized for being overly eager in its relativism (Raskin, 2002). The argument that underlies social constructionism's purported unbounded relativism is based on the presumption that "without a single, stable reality on which to rely, research may tend to feel lost and ungrounded" (Raskin 2002, n.p.). However, social constructionists view this boundless relativism and lack of a single, dominant reality as one of the strongest assets of its perspective. Raskin perceived this relativism as generating a less dogmatic perspective that is more objective and flexible. Raskin also suggested that the relativism of social constructionism encourages interpersonal collaboration and the beneficial re-examination of sometimes stifling cultural practices.

3.1.6. Additional philosophical considerations

While there is ample support for the selection of social constructionism as a broad philosophical orientation, it is worthwhile to explore additional perspectives which may inform or complement the perspective I selected. Numerous similarities are shared across postmodernism and social constructionism, namely the interpretivist epistemological stance, emphasis on the role of language, and rejection of the belief in the existence of an objective reality.

Dervin (1997) mentioned more than a dozen orientations in which the nature of context is a central consideration, including social constructionism. The symbolic interactionist perspective closely parallels both social constructionism and cultural relativism, as language, emphasised in social constructionism, is related to the use of symbols, upon which symbolic interactionists focus their research.

The cognitive perspective is commonly used in information science research, however, this perspective often neglects the role of context in favour of the individual, as previously mentioned. While all of these perspectives are valid and may also be relevant to my research, I chose social constructionism due to precedents set by Savolainen (1995; 2007; 2009), who conducted benchmark research in everyday-life information seeking from a social

constructionism perspective. Savolainen's research, amongst other compelling reasons previously mentioned, ruled out the use of competing orientations.

3.1.7. Summary of research paradigm

The perspective outlined above is referenced throughout this research. The relativist ontological stance and interpretivist epistemological stance selected for use in this research have informed the analysis of the literature, selection of the methodology and development of the research design, as well as the collection, analysis, interpretation of the data. The conceptualisation of reality as socially constructed also informed my research at every stage, from analysis of the literature to the development of conclusions, as the research problem, question, and objectives are based upon a social constructionist theoretical perspective.

3.2. Qualitative research design

I chose a qualitative approach as it permitted me to use an interpretive epistemology to holistically investigate the contextual dimensions influencing information behaviour.

The iterative and adaptable nature of a qualitative methodology is one of its greatest assets. According to Morse et al. (2002) "qualitative research is iterative rather than linear" (p. 17), in contrast to most quantitative research methodologies. Williamson (1986, p. 87) also suggested that "interpretivist research design tends to be nonlinear and iterative, meaning that the various elements in the research are interwoven, with the development of one influencing decisions about the others" (p. 87). According to Komlodi and Carlin (2004), "qualitative methodologies allow for the examination of unknown factors and relationships without having to define these in advance" (p. 5). The qualitative methodology selected permitted me to explore these unknown contextual factors and relationships between information behaviour and context. Komlodi and Carlin (2004) also support the use of interviews and observations in information-seeking behaviour research, advising that a qualitative framework will ensure unbiased exploration leading to the discovery of "patterns and themes that are potentially significantly different from North American information seeking behavior and its abstraction" (p. 5).

3.2.1. Sense-making methodology

The selected qualitative methodology was influenced by Dervin's Sense-making Methodology (SMM). SMM was developed by Dervin and elaborated upon by other scholars, based primarily on the theories of sense-making. A summary of underlying theories behind sense-making and its implications in information behaviour research are described in section 2.2.5.1. The parallels between SMM's core assumptions and the philosophical orientation of my research make it relevant and appropriate for use in this study.

While SMM is not inherently a qualitative or quantitative methodology, I chose a qualitative SMM approach. A great deal of Dervin's literature details the operationalization of SMM in various contexts. SMM, while being highly developed, benefits from being a flexible methodology, and can be adapted to suit a variety of different research objectives. SMM has had the greatest influence on the data collection methods in this research.

A number of SMM data collection tools exist, including:

- SMM Micro-Moment Time-Line Interview
- SMM Life-Line Interview
- SMM Micro-Element Interview
- SMM Q/ing Interview (Dervin, 2008)

SMM has also been used to guide focus group data collection in a number of studies. Each SMM data collection technique suits different research objectives. For the current research, the SMM Micro-Moment Time-Line Interview was selected. According to Dervin (2008 p. 23) "the SMM Micro-Moment Time-Line Interview asks informants to describe their sense-makings and sense-unmakings as they occurred in the "time-line steps" of a given situation". The situation under investigation was a critical incident of information behaviour, explained in section 3.3.1.2. Dervin developed a roster of questions to be used in SMM interviewing. This roster of questions is attached in Appendix A. According to Dervin (2008), these questions have been developed with the intention of "giving informants time to think deeply beyond surface stereotypes about their situations and to share deep articulations" (p. 20). These questions were used as a component of a critical incident technique interview.

SMM also influenced the unit of analysis selected for investigation. According to Dervin (2008) “typically, SMM studies use units of analysis smaller than the person” (p. 23). Dervin’s example of the “informant-in-situation” unit of analysis is very similar to the “critical incident” unit of analysis.

The selection of the tools for analysis was flexible as SMM is primarily concerned with data collection techniques. Section 3.3.2 provides an account of the data analysis methods used in this research.

Ethnography is a research method in which a social group is observed and studied, with emphasis on the culture of the social group (Bryman, 2008 p. 402). My research explores one particular non-Western society, Laos. For this reason, this research has ethnographic components.

While ethnographic research is common in disciplines such as anthropology and sociology, information science research may also benefit from an understanding of the basic principles of ethnography, and the use of research methods informed by these principles. Bow (2002) describes ethnography as combining multiple techniques, such as interviewing, focus groups, observation and questionnaires, and also recognises the flexibility of ethnography to emphasise certain techniques or leave certain techniques out altogether if necessary (p. 267). Participant observation, the name given to the preferred array of data collection techniques used in ethnographic research, implies that the researcher is a participant in the community under investigation. Participant observation is thus not limited merely to observation, but includes a diverse range of data collection techniques, including interviews and surveys (Bryman, 2008). Bryman (2008) describes ethnography as a research method in which the researcher:

- Is immersed in a social setting for an extended period of time
- Listens to and engages in conversations
- Interviews informants on issues that are not directly amenable to observation
- Develops an understanding of the culture of the group and the people’s behaviour within the context of that culture. (p. 402-403)

Based on this understanding, my research has employed components of ethnographic research methods.

3.3. Method

In this section I explain the methods utilised in addressing the research problem and research questions outlined in Chapter 1. The data collection methods, data analysis methods, and other factors influencing the implementation of the research are also described in this section.

The methods for implementing the research were developed based on relevant literature and the objectives of the research. According to Gorman, Clayton, Rice-Lively & Gorman (1997) “qualitative researchers seek to be totally open to the setting and subjects of their study, allowing these to inform the process and modify general research plans” (p. 38). The data collection was therefore approached from a holistic and iterative perspective which allowed for modification of the research plans in response to the setting and subjects under investigation.

3.3.1. Data collection method

Consideration for both the research objectives and the research questions guided the selection of appropriate instruments. Talja (1997) suggested that “it is impossible to get unmediated knowledge about a person’s cognitive skills or even information-seeking behaviour, because the ways in which they are accounted for are always mediated by culturally constructed interpretive repertoires” (p. 74). Due to the necessity of examining information behaviour through personally constructed interpretations, I recognised that the contextual dimensions influencing information behaviour would be embedded in any description of an information practice. After thoughtful consideration of this issue, as well as a survey of applied research in the scholarly literature, the use of Dervin’s micro-moment time-line interview technique emerged as the most relevant to the research objectives. The micro-moment time line interview is a semi-structured interview technique in which “respondent and interviewer together explore the respondent's journey through a situation he or she identifies” (Cardillo 1999 n.p.). This choice is supported by research in information behaviour such as Savolainen (1995), McKenzie (2001), and Cardillo (1999) who employed semi-structured interviews to investigate everyday information behaviour.

Geert Hofstede (1980) described the methods commonly used by social scientists to investigate “human mental programs” and suggests there are four categories of inquiry tools. These categories are illustrated in Table 9 below:

Table 9 - Strategies for operationalizing constructs about human mental programs (Geert Hofstede, 1980)

	Provoked	Natural
Words	1 – Interviews Questionnaires Projective tests	2- Content analysis of speeches Discussions Documents
Deeds	3 –Laboratory experiments Field experiments	4 – Direct observation Use of available descriptive statistics

The strategies identified by Geert Hofstede may also be effective in researching information behaviour. Tuominen et al. (2005, p. 329) suggested that conversation analysis and discourse analysis are the most common analysis methods within the social constructionist orientation, and may provide rich data for the study of everyday life information behaviour.

According to Walsham (1995) “the role of participant observer or action researcher involves the researcher being a member of the field group or organization, or at least becoming a temporary member for some period of time” (p. 77). While Walsham encouraged the researcher to become a part of the community he or she is investigating, it may still be difficult for a researcher to be considered anything but an outsider to many groups, despite spending considerable amount of time integrated into the group’s context. This is described as a potential issue later in this chapter. However, it is in this capacity as a “temporary group member” in which data can be collected and understood. Walsham (1995) identified six sources of evidence for case studies: documents, archival records, interviews, direct observation, participant observation, and physical artefacts (p. 78). Walsham (1995) also suggested that in interpretive case study scenarios where the researcher is an outside observer, “interviews are the primary data source, since it is through this method that the researcher can best access the interpretations that participants have regarding the actions and events which

have or are taking place, and the views and aspirations of themselves and other participants” (p. 78).

The current study used semi-structured interviews with a critical incident technique component to collect data. The development of the data collection instrument is described in section 3.3.1.3.

3.3.1.1. **Semi-structured interviews**

The primary data collection instrument was the SMM Micro-Moment Time-line Interview with a critical incident technique component. The micro-moment time-line interview is a semi-structured interviewing technique developed by Dervin. According to Dervin (2008) the “SMM Micro-Moment Time-Line Interview asks informants to describe their sense-makings and sense-unmakings as they occurred in the time-line steps of a given situation” (p. 20). Dervin suggests that the Micro-moment time-line “is the deepest dig into a single situation so far constructed as an SMM interviewing approach”, as well as “the approach that most clearly reflects SMM's meta-theory” (p. 23)

During the interview, the sense-making moment is captured metaphorically in the sense-making triangle of situation-gap-uses/helps (Cardillo 1999 n.p.). This triangle is illustrated in Figure 10. According to Dervin (2008) the SMM metaphoric triangle with its accompanying roster of questions is applied at each time-line step of the interview by focusing on the point in time when the sense-making (and un-making) occurred. The point at which the gap is bridged results in an outcome of uses, helps, hurts, and consequences.

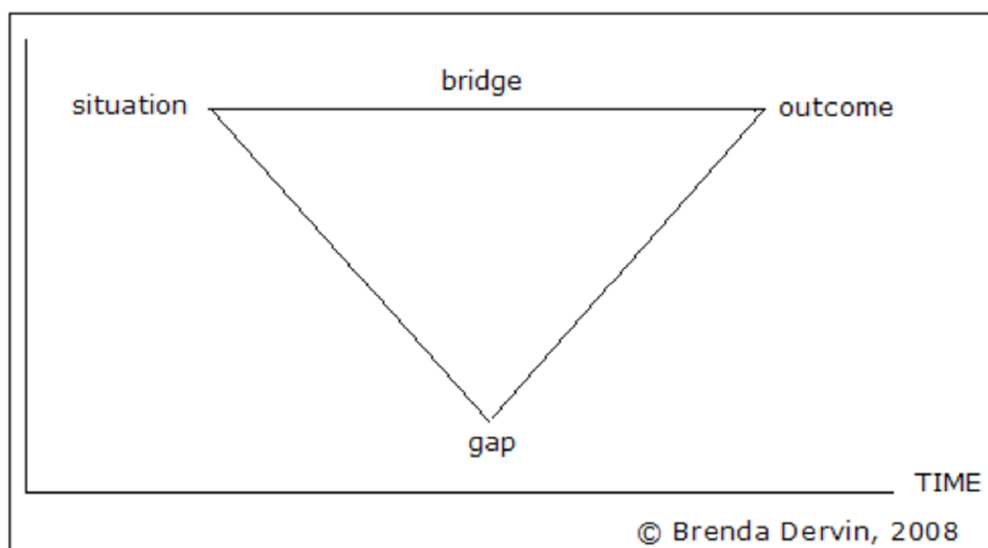


Figure 10 – The situation-gap-outcome triangle (Dervin 2008, p. 18)

Operationally in interviewing, the SMM triangle with the roster of questions (Appendix A) is used over and over again in order to elicit rich data regarding the phenomena under investigation (p. 20).

The micro-moment time-line interview and the critical incident technique are similar data collection techniques. The critical incident technique is discussed in greater detail in section 3.3.1.2. The interviews also contained a component designed to collect relevant contextual information including general demographics. As mentioned previously, contextual influences are embedded within the descriptions of information behaviour, identified through the reporting of critical incidents. In addition, the research protocol and interview schedule were designed to include questions and prompts aimed specifically at drawing out significant contextual factors.

3.3.1.2. **Critical incident technique**

The critical incident technique (CIT) as a means of conducting social research was introduced following World War II by Flanagan (1954). Flanagan defined CIT as “a set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles” (pp. 357—358).

Traditionally, CIT was used as a component of quantitative research within the dominant positivist paradigm of the era. However, recently scholars such as Chell (Chell and Pittaway, 1998; Chell, 2004), Hamer (2003), and Radford (2006) have explored the use of CIT from a social constructionist perspective, within a qualitative research framework.

Chell and Pittaway (1998) concisely defined CIT as “a qualitative interview procedure which facilitates the investigation of significant occurrences (events, incidents, processes or issues) identified by the respondent, the way they are managed, and the outcomes in terms of perceived effects”(p. 25).

The use of CIT in research has multiple objectives. It was initially developed to permit researchers to gain an understanding of incidents of a critical nature from the perspective of the individual under investigation. Eventually, importance began to be placed on also understanding the cognitive, affective, and behavioural dimensions of the individual’s experience (Chell & Pittaway, 1998). According to Chell and Pittaway (1998), CIT was developed, and continues to develop, within a theoretical framework based upon the principles of subjective research, in which the researcher implicitly understands that “reality is phenomenal and not concrete, that data are subjective rather than objective and that knowledge is socially constructed” (p. 25). Therefore, the use of CIT was appropriate for the current interpretive research, and the social constructionist framework that underpins it.

3.3.1.3. Procedures for gathering data

The roster of SMM questions is attached as Appendix A. The use of these questions was guided by the principles of the critical incident technique and the sense-making theoretical framework. The development of interview questions was informed by accounts of CIT use given in the scholarly literature, in addition to Flanagan’s initial guidelines, with emphasis on the use of CIT in information behaviour research. Fisher and Outlon’s (1999) discussion of the use of CIT in library and information science provides a great deal of practical advice on the use of the technique, as does Radford’s 2006 report on the use of CIT in a large-scale American study. Radford’s (2006) study involved the paper-based collection of 2,416 critical incidents. However, large numbers of incidents are not necessary due to the flexible nature of CIT, because larger sample sizes do not necessarily provide richer data. Hamer (2003) conducted seventy-five-

minute in-depth CIT interviews with just eight participants, yet was effective in eliciting rich data. Fisher and Oulton (1999) suggest “the underlying rationale is not to be able to make statistical generalisations but rather to ensure that the whole content domain is covered” (p. 115).

In addition to the CIT component of the interview, Fisher and Oulton (1999) suggest that demographic information also be collected to help in describing the subjects. Other similar pragmatic advice guided the development of the semi-structured interview schedule for the research. According to Flanagan (1954), ten per cent more incidents are provided by participants who are asked about positive incidents first. To ensure adequate data collection, the interview schedule (appendix A) was designed in the recommended manner.

I understood a *critical incident* to be any incident of information behaviour that is critical from the perspective of the interviewee for the purposes of data collection. The incident could have been an act of needing, seeking, or using information, under any circumstances, that is perceived to be significant to the participant. Research using the CIT to investigate information behaviour has used different language to elicit descriptions of information behaviour, including reference to important decisions, problem solving, or information sources (S. Fisher & Oulton, 1999; Hamer, 2003; Radford, 2006). Since the research intended to investigate everyday information behaviour, I used terms such as “decision making” and “problem solving” to refer to information related decisions or information problems.

In order to capture the role of context in everyday information behaviour, relevant literature on principal contextual factors was investigated to provide an informed overview. In addition, contextual factors were investigated through the responses to interview questions aimed at identifying both overt contextual influences, as well as the core cultural values.

Walsham (1995) also provided quite pragmatic advice for ethnographic researchers in interpretive case studies, particularly regarding interviewing and field notes. Walsham suggested that note-taking supplemented by audio-recording where appropriate is one sensible approach; however it is important to bear in mind that the presence of an audio-recording device may be intimidating or inappropriate in some circumstances. Walsham’s prediction that an audio-recording device could have an effect on participant’s behaviour proved to be

somewhat accurate during the course of data collection; however, in order to ensure accuracy of responses, the benefits of the use of an audio recording device outweighed the potential negative consequences. Detailed field notes were also recorded during interviews, though the verbatim transcriptions of the interviews provided the bulk of the data used for analysis.

3.3.1.4. **Preliminary investigation, piloting and interview schedule**

Fisher and Oulton (1999) suggested the use of piloting in developing CIT questions and probes, as do Ellinger and Cseh (2007). To assist in the development of the research, potential interview questions were evaluated during a focus group discussion held in early April, 2011 with a group of Lao government officials studying English in Wellington¹. The eight individuals participated in an informal group discussion during which potential interview questions were presented and the participants were asked to provide feedback on the suitability of the proposed questions and provide preliminary responses. Based on this preliminary study, multiple lines of questioning emerged as being more effective in eliciting rich data regarding the contextual factors and information behaviour of Lao individuals. The focus group was conducted in English and field notes were taken. The research protocol and interview schedule attached as Appendix A were informed by responses and feedback of the preliminary study.

Upon arrival in Laos for the commencement of fieldwork, I conducted a preliminary interview with a personal contact using the proposed interview schedule to ensure rigor and validity, as well as confirm translation accuracy. An audio recording of the preliminary interview and English-Lao interpretation was verified by a senior official at the National University of Laos (NUOL) for quality of translation and adherence to NUOL research protocol. Upon successful initial analysis and verification of translation of the preliminary interview data, the data collection commenced. At that time, lines of questioning and prompts in the proposed interview schedule were revised or refined to improve the quality of data collected. The data collected during the preliminary interview were deemed valid, and included in the data used for analysis.

¹ This project was approved by the School of Information Management Human Ethics Committee.

3.3.1.5. Sampling

While multiple sampling techniques have the potential to provide rich data regarding context and information behaviour, convenience sampling with a purposive component emerged as the most suitable method for my study. Several factors influenced the selection of the sampling method. While random sampling methods may provide data with less likelihood of bias or more representational data, research undertaken by an outsider is limited by the social, cultural, political, and linguistic context of Laos. However, the use of convenience sampling does not necessarily imply the data is unrepresentative or biased. According to Bryman (2008) social research is often based on convenience sampling (p. 183).

In addition to the initial convenience sample, the research made use of snowballing techniques to solicit additional participants.

While the initial sample was based on convenience, purposive selection criteria were applied to potential participants. The purposive criterion in this case was the selection of potentially "information-rich cases". According to Patton (1990), "information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of research; thus the term purposeful sampling" (p. 169). For my study, *information-rich cases* were deemed to be those individuals who were able provide a great deal of data illustrative of their information behaviour. For example, individuals who had either unique or highly developed information behaviour, individuals who engaged in a wide variety of information behaviour on a regular basis, or who may have been able to richly articulate their information behaviour, were all potentially information-rich cases. Determining the potential for an information-rich case before an interview commenced was not without challenges, however, the above mentioned criteria were communicated to the initial convenience sample, who recommended additional participants based on the perception that their friend, colleague, or family member had the potential to be an information-rich case.

The research included a sample size of 30 individuals. According to Cardillo (1999) "interviews with many members of a group provide a foundation for generalizability, statistically verifiable interpretations, and strong conclusions" in sense-making research (n.p.). However, Cardillo also argues that "a case study based on a single, in-depth interview can yield extremely rich data,

insights, and understanding; can provide unique and powerful challenges to generalizations; and can serve a useful heuristic function by suggesting new hypotheses for further research" (n.p.).

The research adopted an approach informed by Cardillo's suggestions, in addition to techniques used in the critical incident technique. For this reason, neither "interviews with many members of a group", nor "a case study based on a single in-depth interview" are appropriate for the research. Instead, a moderate number of in-depth case studies was examined.

The quantity of 30 participants was selected based on previous use of CIT to investigate behaviours. While Hamer (2003) reported that as few as eight incidents provided sufficient data for a successful analysis, that number would not provide suitable data to form the basis of a PhD thesis. Based on the assumption that each individual participant would contribute a minimum of one incident, and may report five or more incidents, 24 was initially selected as the minimum number of individuals required to obtain a satisfactory number of incidents for analysis. However, as data gathering progressed this number was reassessed based on the achievement of saturation - i.e., more participants were added as saturation had not been achieved after 24 participants. The sample size was increased to 30 participants. This permitted me to collect descriptions of over 50 individual information behaviour incidents.

3.3.1.6. Demographics, selection and recruitment of participants

As described in section 2.5 Laos was selected based on a number of criteria that made it suitable for this research. All participants were members of the ethnic majority, though members of the ethnic minority were not specifically excluded from the research. While the notion of "national culture" is subject to some contention among the scholarly community, the contextual factors influencing information behaviour are likely to be similar throughout the country due to the reasons stated in Section 2.2.3. The investigation of individuals from different genders, generations and backgrounds provided a range of information behaviour situation descriptions.

The participants were selected with the intention of representing the varying dimensions and sectors of Lao society. The research did not intentionally structure the sample to meet specific quotas. Participants' ability to speak English played a role in the recruitment process, as a participant's ability to articulate ideas in English simplified the data collection process,

permitted the researcher to better direct the interview, and removed the additional filter of going through an interpreter. However, participants who could not speak English were not excluded from the research. An interpreter assisted with the recruitment and translation of interview questions and responses in 10 of the interviews.

The study was restricted to individuals over 16 years old due to additional logistical and ethical considerations when conducting research with children, as well as advice from personal contacts in Laos.

Tables 10 and 11 provide an overview of the individual research participants. To protect anonymity, pseudonyms have been used throughout this thesis rather than the names of the participants.

Table 10 - Descriptions of individual participants

Participant number	Participant name	Number of situations described	Language of interview	Participant details
1	Nung	1	Lao	31 year old female, from Vientiane, married with 1 child, restaurant owner.
2	Song	1	Lao	25 year old male, single, employed as security guard. Originally from southern Laos.
3	Sam	1	Lao	27 year old female, single, working in an office. Originally from southern Laos, living in rented house.
4	Si	1	English	25 year old male, single, from Vientiane, working at a mining company in central Laos.
5	Ha	1	English	29 year old male, government official, single, no children, living in family home. From Vientiane.
6	Hok	1	English	29 year old male, married, 1 daughter, former government official. Studying full-time towards postgraduate degree. From Vientiane.
7	Jet	1	English	27 year old female, single, formerly working for a bank. From Vientiane, living in family home. Studying full-time towards postgraduate degree.
8	Bet	1	English	27 years old, male, former marketing executive in private sector, lives at home with family. Studying full-time towards postgraduate degree. From Vientiane.
9	Gao	1	English	48 years old, female, originally from northern Laos, government official with postgraduate degree from North America, married with teenage child.
10	Sip	1	Lao	38 year old female, shop owner, from Vientiane. Formerly working in rural area with mining company.
11	Sipet	1	Lao	40 year old female, married with 2 children, shop owner, from Vientiane. Mother-in-law also residing in family home.
12	Sipsong	1	English	31 year old male, married with 1 adopted child. Lives with wife, child, and brother in law. Originally from southern Laos, former government official. Studying full-time towards postgraduate degree.
13	Sipsam	2	English	30 year old male, new father (1 month old baby), married 1 year, from Southern Laos. Formerly working for non-profit as engineer. Studying full-time towards postgraduate degree.

14	Sipsi	3	English	30, female, single with a boyfriend. Studied business and English, worked for a few different companies including mining. Living in family home. Studying full-time towards postgraduate degree. From Vientiane.
15	Sipha	3	English	31 year old male, engaged, living with fiancée, formerly lecturer at National University of Laos. Studying full-time towards postgraduate degree. From Vientiane.
16	Siphok	2	English	33 year old female, married, mother of 2, former National University of Laos lecturer. Studying full-time towards postgraduate degree. From Vientiane.
17	Sipjet	2	English	28 year old female, single, NGO employee from Northern Laos. Lives with 4 brothers, in Vientiane since 2000. Working full time and studying at university towards BA.
18	Sipbet	2	English	22 year old, male, single, studying full time towards BA. From Vientiane.
19	Sipgao	2	English	28 years old, single, female, government official. From Vientiane, lives with parents, brothers and sisters (8 people).
20	Sao	2	English	20 year old single male, studying full time towards BA, from northern Laos.
21	Saoet	2	English	23 year old male, single, studying full time towards BA from southern Laos.
22	Saosong	2	English	43 year old male, hotel guest manager, married, 2 children, from rural area just outside Vientiane.
23	Saosam	3	English	52 year old female, married, with 4 grown children. Retired, previously resident of USA. Living with niece in Vientiane, from southern Laos.
24	Saosi	2	English	28 year old male, from southern Laos, project manager at NGO.
25	Phet	2	Lao	38 year old female, married, with 3 children, from central Laos, housecleaner.
26	Saohok	2	Lao	18 year old female, single, high school student, from central Laos.
27	Saojet	2	Lao	26 year old female, hair dresser, single, from northern Laos.
28	Saobet	3	Lao	62 year old female, married, shopkeeper, with 2 children, from central Laos.
29	Saogao	2	Lao	47 year old female, married, with children, teacher, manager of microfinance group, from Vientiane.
30	Samsip	2	Lao	48 year old female, married, 2 children, food stall owner, from Southern Laos.

Table 11 - Participant demographics

Total number of participants:	30
Total number of situations:	52
Average age of interviewee:	32.87
Male participants:	13 (43%)
Female participants:	17 (56%)
Interviews conducted in English:	20 (66.6%)
Interviews conducted in Lao:	10 (33.3%)

More detailed demographics are provided in Chapter 4.

3.3.1.7. Unit of analysis

In the case of the critical incident technique, the unit of analysis is the incident. In the SMM, Dervin (2008 p. 22) recommends that the unit of analysis be smaller than the individual. Therefore, the information behaviour incident as unit of analysis is appropriate for use. Dervin identifies the “informant-in-situation” unit of analysis as illustrated in Figure 11:

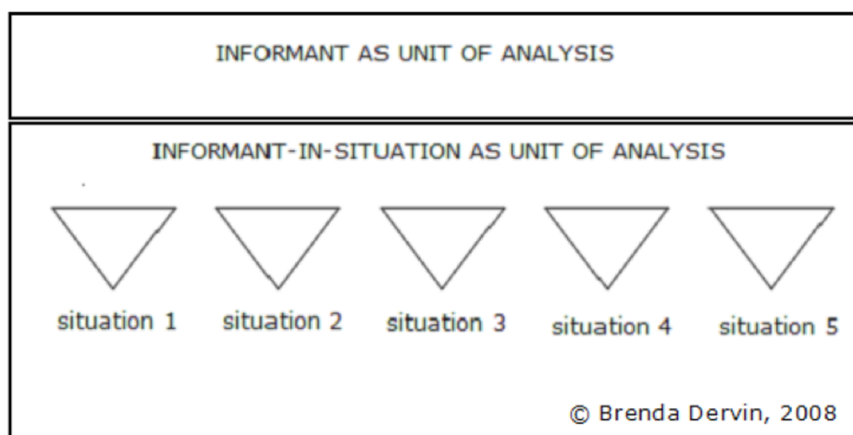


Figure 11 – Dervin’s “informant-in-situation” unit of analysis (Dervin, 2008, p. 23).

For the purposes of the current research, each situation is based around a unique incident of information behaviour. Through the analysis of the incident, contextual factors affecting information behaviour emerged.

3.3.1.8. Overview of fieldwork

The data collection fieldwork produced 52 usable incidents of information behaviour in interviews with 30 different participants conducted over a nine week period. Participants reported a wide variety of information behaviour, in different situations and different environments. I transcribed audio interviews verbatim in English. The transcribed interviews accounted for over 250 pages of text, representing more than 35 hours of audio data. Field notes were carefully examined and relevant information was documented in each individual interview transcript.

3.3.1.9. Summary of data collection

The primary data collection instrument consisted of a semi-structured interview that was refined through the use of a pilot focus group interview with Lao nationals. The interview schedule was designed with Dervin's SMM as a guide with the intention of eliciting rich accounts of critical incidents of information behaviour from selected participants. During the fieldwork, data were collected over a period of nine weeks. Convenience and snowballing sampling methods were used to identify 30 participants who contributed a total of 54 individual incidents of information behaviour, two of which were deemed unusable due to difficulties with understanding. I conducted data collection using Dervin's micro-moment time-line approach, in which each participant contributed one to three information behaviour incidents. This method provided a suitably flexible but comprehensive framework from which to collect data, and later facilitated data analysis, described in the following section.

3.3.2. Data analysis method

3.3.2.1. Introduction and overview

The data collected through interviews were examined using qualitative analysis techniques with the objective of answering the research questions identified in section 1.4:

- 1. What are the contextual factors that influence everyday information behaviour of individuals in Laos?**

2. How do these factors influence the everyday information behaviour of individuals in Laos?

With this objective in mind, the analysis was conducted in three primary phases.

Phase one began with the aim of identifying everyday information behaviour of the participants. Identification of these behaviours was accomplished by using the critical incident technique concomitantly with Dervin's SMM as analytical tools. The critical incident technique was used primarily in the identification of distinct information behaviour incidents, which formed the individual units of analysis for further examination. Dervin's SMM provided the framework from which an understanding of common information behaviours emerged. The everyday information behaviour that was identified during the first phase of analysis is expanded in section 4.1.

Once common information behaviour patterns of the participants were identified, **phase two** began. The aim of phase two was to identify the contextual factors influencing the information behaviour identified in phase one. This aim was achieved through the use of Dervin's SMM concomitantly with discourse analysis as analytical tools.

Phase one and phase two of the analysis addressed the first research question, in which the contextual factors affecting information behaviour in Laos were identified.

The objective of **phase three** was to address the second research question, in which the influence of the contextual factors emerging from phase two of analysis were examined in relation to the information behaviour identified during phase one. This aim was achieved through the use of discourse analysis as the primary analytical tool with additional investigation and interpretation informed by Dervin's SMM.

These three primary phases of analysis and the respective analytical tools employed during each phase are explored in greater detail in sections 3.3.3 and 3.3.4 respectively.

One of the objectives of the research is to identify a methodology for systematically developing contextualised understanding of information behaviour in diverse contexts. This objective led to a fourth phase of analysis which examined the research methods themselves. The fourth

phase was achieved primarily through the use of benchmarking as an analytical tool, and is discussed in section 7.4.

3.3.3. Phase one of analysis

Phase one of analysis consisted of identifying the nature of everyday information behaviour in Laos. This included ascertaining how individuals interacted with information, what kinds of information they preferred, and what kind of information behaviour incidents they reported.

The first objective of phase one was to identify every individual incident of information behaviour that had been collected over the course of the fieldwork.

Flanagan's (1954) critical incident technique provided the framework enabling the identification of distinct information behaviour incidents. These incidents could then be separated from other data including other incidents, and coded as discrete units of analysis for further investigation.

The information behaviour incidents were then classified into groups and the classification was recorded using Microsoft Excel, then coded to determine the domain of information behaviour, the formats of information, and the sources of information consulted by the participants. Codes were developed based on Dervin's sense-making metaphor, pictured in Figure 8 (page 42).

The results of the first phase of analysis are described in section 4.1.

According to Dervin (1992, 1998, 2008) each individual begins his or her sense-making journey in a different contextually laden time-space position. Therefore, the sense-making situation is always unique, even if the question or gap is not. While some commonalities in the sense-making behaviours may exist amongst similar questions or gaps, or within the same individuals describing very different gaps, the situation itself is unique as the individual is starting from a different space in his or her time-space context.

In addition, it was important to keep in mind that the contextually laden time-space point from which each incident is described has influenced how the interviewee approaches and articulates his or her sense-making behaviour. The language used is often indicative of wider contextual factors, and this is one reason why discourse analytic techniques informed the data analysis.

While Dervin goes into great detail on the use of the SMM for data collection, there exists little explanation of how the SMM can be used for data analysis. However, Dervin's SMM was adapted in order to provide a framework from which initial analysis could be conducted. Dervin (1998) suggests that "studies have shown that the number of categories needed to account for the same variance in outcomes when described in verbing terms (i.e. time-space-movement-gap) is far fewer than when described based on traditional categories for tapping diversity (e.g. personality and demographic traits)" (p. 42). For this reason, Dervin's components of sense-making were used as an initial framework, from which other frameworks for codifying and categorising data emerged. The research questions could then be addressed through the analysis of the data using the complementary techniques described in this section.

The components of sense-making identified by Dervin provided codes used for analysis of the interview data. Verbatim interview transcripts were examined for verbal indications that the interviewee was describing a sense-making behaviour that fit into one of the five components identified by Dervin. The components of sense-making are:

- Situation
- Gap
- Sense-making
- Bridge
- Outcome

I used these components during data analysis to identify key aspects of information behaviour.

3.3.3.1. Evaluation of information

Dervin's conceptualisation of information behaviour regards the evaluation of information as an integrated process occurring throughout the sense-making journey. Thus, information evaluation is embedded in every step of sense-making, rather than investigated as a discrete activity.

Conceptualising the evaluation of information as an embedded process occurring at every step of the sense-making journey has the advantage of permitting the investigation of the evaluation

of information from what Savolainen (2006) refers to as a “nonessentialist viewpoint” (p. 1124).

According to Savolainen

“this means that information use is not approached as a process that draws on relatively stable mental models, cognitive styles, and other non-related factors that determine how information is evaluated and encompassed. In contrast, [SMM] provides heuristic tools guiding the positioning of questions of how people seek, interpret, and design information” (2006, p. 1124).

How people used and evaluated information was therefore captured through the SMM data collection instrument, embedded within the components of the sense-making metaphor.

However, for the purposes of the research, some emphasis has been placed on the evaluation of information as a discrete activity during analysis. Specific attention to individuals’ descriptions of how they evaluated information and the resulting outcomes provided greater evidence of the contextual factors affecting information behaviour and produced additional insights into the overarching features of information behaviour in Laos. For this reason, with consideration for Dervin’s intended conceptualisation of information behaviour and use of the sense-making methodology, evaluation of information was explicitly considered.

Interview questions regarding confidence or trust in information sources yielded comments from the participants indicating their evaluative processes. The participant’s descriptions of how they evaluated their information sources was then considered along with the other components of the sense-making metaphor using discourse analysis and consideration for explicit conceptualisations of information evaluation, as in information literacy literature (e.g. Eisenberg & Berkowitz, 1990; Johnston & Webber, 2003; Julien & Barker, 2009).

The following sections explain in greater detail the primary components of Dervin’s sense-making metaphor and how they were used to conduct analysis.

3.3.3.2. **Situation**

While the ways of articulating and describing the situations in which interviewees began their sense-making behaviour varied considerably, commonalities exist from which conclusions can be drawn. These conclusions are described in detail in section 4.1.

3.3.3.3. Gap

While the interviewee's description of the situation is essential to understanding the overall perspective and environment from which the sense-making behaviour emerges, the individual's gap in knowledge or his or her question is often the impetus for the sense-making behaviour.

As with the situation phase of the sense-making behaviour, how interviewees articulated their gap in knowledge or question varied considerably. However the interviewees' descriptions of their questions or gaps in knowledge permitted me to identify common information needs.

Some of the participants' gaps in knowledge that acted as impetuses for information seeking included needing consumer information about certain products an interviewee intended to buy, seeking medical advice for health related concerns, a desire for information about educational or professional opportunities, and information related to social or recreational activities. The identification of these broad clusters of "gaps" provided a framework from which to categorise information behaviour that was recorded during the course of data collection. During analysis I found that every incident of information behaviour fit within one of five broad clusters. These clusters are further described in section 4.1.2, and were identified to be consumer information, recreational information, professional information, educational information, and health information.

As this research aimed to investigate everyday information behaviour, rather than information behaviour related to a specific type of task or environment, incidents were gathered from any aspects of an individual's life. I have used the term "professional information" to describe information related to an individual's work or professional world. Incidents in the professional information cluster exclude information behaviours related to specific work tasks, but include information needs, seeking and use related to an individual's professional or work life, including job seeking.

The grouping of incidents into these clusters provided a useful framework from which data analysis could be conducted more efficiently and effectively. The identification of these categories also provided additional dimensions from which the individual cases could be examined through comparison against similar information incidents. According to Dervin

(1998), in most studies “diversity is made manageable by codifying based on the time-space-movement categories and by anchoring it in descriptions of material situations and actions” (1998, p. 42). Dervin (1998, p. 42) suggested that categorising data using *verbings* is more efficient than traditional categories, such as demographics, therefore I employed both methods in my research. These clusters, and evidence supporting the use of such categories, are provided in section 4.1.1.

3.3.3.4. **Sense-making**

The interviewees’ descriptions of activities that included verbs such as “searching”, “going”, “asking” are all types of “verbings” that were identified in the transcripts and codes as such. More detailed explanation of Dervin’s interpretation of sense-making and her use of the term *verbing* was explored in section 2.2.5.1. For the purposes of coding the data I collected, any descriptions of activities that used verbs or action words was identified as the *sense-making* component in the overall sense-making behaviour. Interviewees’ descriptions of procedures, processes, or strategies used to respond to the gap in their knowledge were also coded as part of the sense-making component of the sense-making metaphor. The results of the analysis of interview data determined to be reflective of sense-making behaviours are provided in section 3.3.3.

According to Chatman’s research into information poverty, “information seeking encompasses not only information seeking, but also information avoidance and disinterest” (Chatman, 2000, p. 6). Consequently, a lack of information seeking is in itself a sense-making behaviour. Dervin also describes this as *sense-unmaking*, whether or not it is intentional.

3.3.3.5. **Bridge**

Decisions to use certain information or resources to bridge a gap in knowledge are dictated by a number of factors. Interview data were examined to identify evidence of the ideas, attitudes, beliefs, and values that influenced individual’s sense-making behaviour, and what contextual factors affected the bridge used in a sense-making incident.

The bridges used to resolve a gap in knowledge can be categorised according the format of the information used. The ideas, attitudes, beliefs, and values that resolve a gap can be

communicated to an individual via three primary formats: interpersonal information; printed information; and electronic information.

Some sense-making journeys do not involve the acquisition of knowledge or information, as gaps in knowledge may be bridged by experiences, observation, or feelings. While the interview instrument strived to specifically collect incidents that used informational resources as bridge, some participants did describe non-informational bridges. These non-information resource sense-making journeys are indicative of contextual factors, however they may not constitute information behaviour incidents if the participants did not interact with any external sources of information or communicate with anyone. How participants used these non-informational bridges is explored in section 4.1.2.

The informational bridges used in the majority of the sense-making incidents under review were categorised into three formats of information most commonly encountered in the Lao context. These formats of informational bridges are explained in greater detail in Table 15 (p. 131).

3.3.3.6. Outcome

Outcomes include “helps, facilitates, hurts, hindrances, consequences, impacts, and effects” (Dervin, 2008). The results of sense-making activities are categorised as part of the outcomes component of the sense-making metaphor. However, outcomes can include accounts of situations in which their information need was not resolved, or they felt even less certain of their understand after engaging in information seeking behaviour. These descriptions of outcomes and their significance in information behaviour in Laos are provided in section 4.1.2.

3.3.3.7. Coding and examples of phase one analysis

The qualitative textual data were coded using Nvivo software and Microsoft Excel. Codes were developed based on Dervin’s SMM. Each information behaviour incident was analysed to identify the significant moments of sense-making, including, the situation, the gap, the sense-making, the bridges, and the outcomes. Table 12 provides some examples of how Dervin’s sense-making metaphor was used to code raw data.

Table 12 - Coding structure and examples

Code/Phase of sense-making	Dervin's definition	Examples from interview data
Situation	History, experience, horizons, constraints, barriers, habits/skills	"I was a/at/in..." "At that time..." " I had done..."
Gap	Questions/confusions, muddles/riddles, angst	"I wanted to know..." "My question was..." "Wanted more information about..."
Sense-making	Verblings, procedurings, strategies/tactics	"Asked my friends"" "Went to the shop" "Searching the internet"
Bridge	Ideas/cognitions/thoughts, attitudes/beliefs/values, feelings/emotions/intuitions, memories/stories/narratives	"I felt..." "I thought..." "I found..." "I used..." "I liked..."
Outcome	Helps/facilitations, hurts/hindrances, consequences/impacts/effects	"I made the decision to..." "I found out..." "I was satisfied..."

3.3.3.8. Summary of phase one analysis

Through the use of the critical incident technique and Dervin's SMM as analytical tools I analysed the data and identified everyday information behaviour of the research participants. This phase therefore provided a first step towards the identification of the contextual factors that affected everyday information behaviour, and addressed key aspects of both the first and second research questions.

Phase one analysis was followed by phase two, explored below.

3.3.4. Phase two analysis

According to Cox (2012), “escaping a narrow preoccupation with goal-oriented information seeking, we need to first ask within any practice what, for social actors, constitutes information, and then how do they find, use, create and share it” (p. 185). I asked this question as a starting point to investigate the contextual factors affecting the participants’ information behaviour. In phase two I used Dervin’s SMM as a framework as in the first phase. I also used discourse analysis to derive deeper understanding from spoken and written words.

Though the sense-making metaphor as put forth by Dervin (1983, 1999, 2008) does explicitly make reference to the context in which the sense-making behaviour occurs, it does not provide an explicit framework from which to analyse contextual factors. For this reason, the interpretation of the data was at times quite ambiguous. Dervin indicates on numerous occasions that one cannot separate context from an individual’s behaviours and sense-making. Therefore, contextual factors are present in every step or phase of the sense-making journey. While context might have been more apparent in some steps on the journey, nevertheless it is omnipresent and exerts an influence along every step of the sense-making journey, from the individual’s situation in which he or she first perceives a gap in knowledge, to the outcomes he or she achieves through sense-making behaviour.

The aim of the second phase of analysis was to identify the contextual factors influencing information behaviour in Laos. According to Dervin (1997) “context is conceptualized, usually implicitly, as a kind of container in which the phenomenon resides. The trick appears to be to pinpoint exactly what aspects of the container impact or relate to the phenomenon” (p. 14). To conceptualise context in this manner I analysed interview data for evidence of specific information behaviour in phase one, which I then re-examined for evidence of contextual factors. This step included looking at how the participants identified their information needs, sought information, and used information. Once these dimensions of information behaviour were established for the participants, I examined the contextual factors that influenced the ways in which the participants needed, sought, and used information. The analysis of the

interview data then shifted to identify the primary contextual factors that influenced not only the explicit behaviours and values, but also core cultural values and assumptions.

As investigation into the social and cultural context of the participants is one important objective of my research, it was essential to ensure measurement validity. According to Bates (2004), “[a]nalysis of the structure, content, and orientation of narratives reflects the social reality of the narrator”. I was able to develop an understanding of these contextual factors through in-depth analysis of the interview data using the critical incident technique.

These contextual factors were less explicitly identified during interviews, and therefore identification presented a challenge. As expected, the data contained a great deal of embedded information about the contextual factors influencing the participants’ information behaviour. According to Dervin (2008), “SMM has intentionally defined context as an inextricable surround. We are in it, it is in us, as the fish is in water and water is in the fish We can never extract ourselves from it or it from us nor can we fix it”(p. 9). In this sense, SMM has built-in consideration for contextual factors affecting information behaviour, however, SMM does not provide an explicit method for identifying or extracting the contextual factors present in information behaviour. For this reason, phase two consisted of identifying patterns that indicated contextual factors in respondent’s descriptions of their behaviour.

Dervin (2008) suggested that sense-making behaviour was “a fundamental mandate of the human condition”(p. 17). However, Dervin points out that not all sense-making involves problem solving or decision making. Instead, Dervin (2008) suggests that “the sense-maker is the one who ultimately must bridge the gap no matter how much external instruction, ‘information’, acculturation, input, or other external and internal forces form the historical and/or ‘input’ background” (p. 17). For this reason, the identification and description of sense-making behaviour in interview talk provides evidence of an individual’s deeper contextual environment.

I examined each interview for commonalities or clues of embedded contextual factors using the components of Dervin’s sense-making metaphor (situation, gap, sense-making, bridge and outcomes). While many interviewees described similar situations, because they approached the situation from a different time-space starting point, their sense-making behaviour was unique.

However, commonalities in interviewee narratives helped me to understand how and why individuals in Laos tend to approach the need to make sense of a situation in similar ways. These commonalities were identified through examination of interview data that had been coded and organised in phase one analysis. Dervin suggests that SMM studies should use units of analysis smaller than the person. In the current study, the unit of analysis can be described as *informant-in-situation* as explained above in section 3.3.1.7.

3.3.4.1. **Discourse analysis**

Discourse analysis (DA) is a method through which deeper understanding can be derived from spoken or written words. As information itself is communicated through language, discourse analysis provided an ideal framework from which to examine the interview data. Gee (2011a) suggests that language has two primary functions, the first of which is to support “the performance of social activities, and social identities” (p. 1). The second is to support “human affiliation with cultures, social groups, and institutions” (Gee, 1999, p. 1). This understanding of language provides further evidence for the importance of the social context in which individuals interact to construct their reality as identified throughout social constructionist literature, discussed in section 3.1.2. Gee’s (1999) detailed account of the use of discourse analysis in developing an understanding of the discourse under investigation provided my starting point for analysing the discourses in the participants’ interview data.

White (2004) asserts that DA is inherently relativistic as it “rests on philosophical assumptions that multiple versions of the world are legitimate, texts are open to multiple readings, and language is non-representational” (p. 8). Tuominen and Savolainen (1997) also agree with White (2004) that social constructionism is the “philosophical position underpinning discourse analysis” (White, 2004 p. 8).

Discourse analysis has been used extensively throughout information behaviour research. In section 2.4 the idea that information itself is a product of discourse is discussed. Taylor’s (1993) statement that “information is a property of conversation” (p. 92) provides further support for the use of discourse analysis in information behaviour research. The argument in favour of conceptualising information in this manner, and hence, the appropriateness of using discourse

analysis for information behaviour research is supported by Tuominen and Savolainen (1997, p. 89).

McKenzie (2003) used DA to identify information practices in her doctoral dissertation examining the everyday-life information seeking of women pregnant with twins. The ways that accounts are constructed include consideration for “the epistemological orientation of discourse” and “the discursive functions that accounts are meant to perform” (McKenzie, 2003, p. 20). McKenzie suggested that “an account is therefore not taken simply as a realistic representation of underlying cognitive processes, but is seen to have a meaning contingent on the function the discourse is meant to perform” (p. 20). This function the discourse is meant to perform is contextually laden.

Nahl (2007) also developed a method of using DA tools to investigate native English speakers' written accounts of information behaviour in an online environment. While Nahl's method does provide some insight into how DA can be used to investigate information behaviour, her specific methods could not be applied to the data I collected in this study.

Within all the above-mentioned approaches to data analysis, several themes remain common, due to the theoretical perspectives from which this research is undertaken. Morse et al. (2002) suggest that within a postmodernist perspective, “the investigator's experience becomes part of the data” (p. 19) as the researcher understands reality to be dynamic and changing. My conceptualisations and my reality played a key role in the analysis of the data, as I explain below.

Gee (2011a, 2011b) identifies seven building tasks of language and related questions that may be applied to speech or text under investigation as a starting point for DA. I used these questions to analyse the interview transcriptions, supplemented by the methods employed by Talja (1999).

Gee's discourse analysis

Gee's (2011a, 2011b) discourse analysis method was used to interpret the data during phase two of analysis. The collected data were the result of oral interviews involving face-to-face speaking between the participants and myself, sometimes through the aid of the interpreter.

For this reason all of the collected data were in a style of language that Gee refers to as “vernacular”. This style is used when we want to talk as an “everyday person” rather than as a specialist or expert on a certain subject (Gee, 2011a, p. 8). According to Gee, the use of the vernacular style of language expresses the identity or “being” of the individual producing the discourse (2011a, p. 8). Gee views the use of the vernacular style as a method of expressing an opinion based on observations, which is the action or “doing” of the discourse. In addition, a sentence in the vernacular style can have multiple actions, such as to show surprise or inform someone (Gee, 2011a, p. 8)

On the other hand, a specialist style of language would express different identities and perform different actions (Gee, 2011a, p. 8). This represents just one of the ways in which an understanding of discourse and the use of discourse analysis enabled an interpretation of the interview data.

Gee describes seven “areas of reality” that are constructed through the use of language (Gee 2011a, 2011b). According to Gee, “whenever we speak or write, we always (often simultaneously) construct or build seven things or seven areas of reality” (2011a, p. 17). Gee termed these seven areas the “seven building tasks” of language (Gee, 2011a, p. 17). Interviews with participants produced accounts of information behaviour that provide evidence of these building tasks of language, in turn providing indications as to how an individual constructs and perceives his or her reality.

The seven building tasks identified by Gee (2011a) are:

1. Significance
2. Practices (Activities)
3. Identities
4. Relationships
5. Politics (the distribution of social goods)
6. Connections
7. Sign Systems and Knowledge (p. 17-20)

These building tasks are described in greater detail below. Examples of language used by participants to perform these seven building tasks of language, and the contextual factors that emerged from applying Gee's discourse analytic method to the interview data, are provided in the findings section 4.2.1.

Significance

The use of certain language reveals a great deal about the significance the speaker places on things such as events, objects, other people, etc. The language used by participants rendered some subjects of their discourse significant, lessened the significance of others, and signalled to others how the participant viewed their significance.

Practices (Activities)

Discourse often contains accounts of activities or practices in which the speaker has engaged and wants to recount to the listener. Within literature describing discourse analysis, *practice* refers to a "socially recognized and institutionally or culturally supported endeavour that usually involves sequencing or combining actions in certain specified ways (Gee, 2011a, p. 17). This aspect of discourse analysis was particularly important to this research, as it aimed to investigate information practices. Therefore, every interview was analysed to identify multiple accounts of practices and activities.

Identities

An individual enacts his or her identity through speaking or writing in such a way as to compare or contrast this identity to others, either explicitly or implicitly. This identity, and the identities of others, are continually constructed and enacted through the use of language, which transmits the individual's understanding of his or her own identity and the identity of others to those with whom he or she communicates.

Relationships

Understanding relationships amongst different people can be achieved through examining the language used by an individual. Language is used to "signal what sort of relationship we have,

want to have, or are trying to have with our listeners, reader(s), or other people, groups, or institutions about whom we are communicating" (Gee, 2011a, p. 18).

Politics

Gee (2011a, 2011b) uses the term *politics* to describe what can be interpreted as "social norms". *Social norms* refer to how society functions and the individual's understanding of how social goods are distributed. According to Gee (2011a) language provides evidence of how the speaker views the nature of the distribution of social goods, that is, to build a perspective on social goods (p. 19).

Connections

Language is also used to signal the connection or disconnection between things, to build connections or relevance. An individual's use of language can signal his or her understanding of how two people, places, things, events, activities etc. are connected to each other, or unrelated, as the case may be (Gee, 2011a, 2011b). Discourse analysis is used to identify these connections made using language.

Sign Systems and Knowledge

Sign-systems or knowledge in discourse analysis can refer to specific languages, dialects, or systems that are not language, such as equations, graphs, images etc. According to Gee (2011a), these are all different sign-systems, and a speaker's use of language can provide evidence of how the individual favours or disfavors a particular system over another. How an individual speaks will provide evidence of how the individual feels about certain forms of knowledge or systems used for expression, which ones he or she believes to be relevant, prestigious, privileged, or not. An individual will "build prestige or privilege for one sign system or way of knowing over another" (Gee, 2011a, p. 20).

Additional tools for discourse analysis

Another valuable tool used within discourse analysis is the method put forth by Talja (1999) in which accounts are examined for evidence of macro-social phenomena. This method can be used to complement Gee's DA method and provide additional insights in qualitative data.

Talja's (1999, p. 8) method suggested the use of three questions for examining interview data within a discourse analytic framework. These questions are:

- What is the starting point behind this account?
- On what kinds of limitations of perspective is this particular description based?
- What other statements in participants' interview talk are based on the same perspective?

Through linking descriptions, accounts and arguments to the viewpoint from which they were produced permitted me to identify some of the macro-social factors described by Talja (1999) that influenced the information behaviour of the participants. An example of the application of this analytical tool is provided in section 4.2.2.

Discourse analysis with non-native speakers

Discourse analysis is a technique that has multiple styles and can be applied in many different ways. According to Gee (2011b) "there is no grand agreed-upon body of content for discourse analysis" (p. x), and the possible approaches to conducting a discourse analysis are too numerous and controversial to identify one accepted technique. Instead, Gee (2011b) offers 27 different tools for conducting a discourse analysis, some of which "yield more illuminating information" (p. x) than others, depending on the type of data.

Participants in my study spoke in non-native English, or in Lao which was simultaneously translated into English during data collection. Some discourse analytic tools identified by Gee (2011b, p. 196-198), such as the Deixis tool, the Intonation tool, and the Vocabulary tool, etc., rely on native speakers' use of certain grammar or speech patterns. These tools were therefore less useful in interpreting the interview data than other tools elaborated by Gee. Ultimately, the seven tools related to the building tasks of language were recognised as being effective and

the most relevant to uncovering the underlying contextual factors embedded within the interview data, and proved sufficient and effective for my research.

Summary of phase two analysis

Building from the previous analysis phase in which information behaviours were identified using the critical incident technique and Dervin's SMM, phase two analysis was carried out with the aim of establishing which contextual factors affected the previously identified information behaviours in Laos. This aim was achieved through the use of elements of Dervin's SMM, as well as Gee's (2011a, 2011b) discourse analytic method.

This analysis resulted in the discovery of a number of primary and secondary contextual factors affecting information behaviours, described in section 4.2.

3.3.4.2. Phase three analysis

The third phase of analysis consisted of using the previously employed analytical tools of discourse analysis and sense-making to examine the relationship between the information behaviours identified in phase one, and the contextual factors that emerged from phase two of the analysis.

The primary analytical tool used for establishing the relationships between information behaviour and contextual factors was Gee's discourse analytic method, discussed in section 3.3.4.1. Dervin's SMM provided a framework from which certain relational elements of information behaviour and context were also identified.

Participants' talk, as discussed in section 3.3.4.1, provided a number of clues as to how an individual's unique context affects how he or she engaged in information behaviour. Gee's (2011a, 2011b) seven building tasks of language were also used to identify the influences of these contextual factors. Appendix B provides an overview of how Gee's seven building tasks of language discourse analytic tools were applied to each information behaviour incident to provide evidence of the contextual factors' effect on information behaviour. The results of this analysis are explored in Chapter 6

3.3.4.3. Phase four analysis

A fourth phase of analysis was conducted in order to establish the suitability of the research methods for use as a duplicable research methodology in information science. This phase of analysis on personal evaluation and benchmarking as analytical tools to investigate the research methods themselves. The results of the three primary phases of analysis were considered concomitantly with the research objectives, and the suitability of the three primary analytical tools was benchmarked against established frameworks in qualitative research methods. The results of this phase of analysis, including how the data collection tools and the three primary analytical tools were adapted, and their suitability and overall contribution to the development of a research methodology for contextualising information behaviour are discussed in section 7.4.

3.3.5. Summary of Data Analysis Method

This chapter has elaborated the method used to analyse the data resulting from interviews with 30 individuals in Laos. The use of a three-phase analysis permitted the research to address the research questions progressively, by:

1. Identifying individual information behaviour incidents through the use of the critical incident technique;
2. Identifying the overall patterns and extent of information behaviour in which interviewees engaged through the use of Dervin's SMM;
3. Identifying the contextual factors affecting information behaviours through the use of Dervin's SMM and Gee's discourse analytic method;
4. Identifying the relationships between the contextual factors and the information behaviours through the use of Gee's discourse analytic method and supported by Dervin's SMM.

The first phase of analysis was done through classification and coding of transcribed interview data, which was then used to generalise behaviours according to existing models of information behaviour. The second phase was done through the examination of interview data with the intent of identifying how participants constructed reality around them, evidenced by their

choice of language and words. Phases one and two addressed the first research question by establishing the contextual factors that influenced everyday information behaviour in Laos. These findings are discussed in section 4.2.

The third phase of analysis identified the relationships between the information behaviour identified in phase one, and the contextual factors identified in phase two. As discussed above, the primary analytical tool employed was Gee's discourse analytic method. The findings resulting from this phase of analysis are described in Chapter 6 .

A fourth, secondary phase of analysis, addressed the research objective of identifying a research methodology for investigating information behaviour in diverse contexts. The findings of this secondary phase of analysis are discussed in section 7.4.

Chapter 4 **Information behaviour and contextual factors**

4.1. Everyday information behaviour in Laos

In this chapter I describe the results of data collection and the first phase of analysis, providing evidence to illustrate the results of my research. This chapter summarises my interpretation of data during phase one of my analysis in order to identify the everyday information behaviour of the participants, which in turn provided a basis from which I could explore the contextual factors affecting how individuals in Laos interacted with information. I also describe how I interpreted the data in phase one of my analysis in order to address the research questions, and provide some descriptions and explanation of how the research questions were addressed in this chapter.

These results informed the discussion and implications of the findings as described in Chapter 6.

The data collection process was designed to capture incidents of everyday information behaviour, and the contextual factors that influenced them. Examination of the participants' sense-making situations revealed a number of interesting features of information behaviour in a non-western society and the underlying contextual factors that shaped how individuals interacted with information.

The types of behaviours and ways in which people interacted with information in everyday contexts varied greatly from one individual to another, and sometimes from one situation to another. A wide variety of different information practices and behaviours were described by participants, including multiple ways of articulating information needs, seeking information, using information to resolve their information needs, and evaluating information and sources of information.

The overarching themes that emerged from phase one of analysis are described in greater detail below.

4.1.1. Clusters of information behaviour

More than 54 incidents of information behaviour were collected, and certain commonalities and patterns became apparent over the course of data collection and analysis. Five principle clusters of circumstances in which information behaviour occurred emerged during analysis. These clusters are:

- Consumer related information behaviour
- Professional related information behaviour
- Educational related information behaviour
- Social or recreation related information behaviour
- Health related information behaviour

As mentioned above, all of the incidents reported by participants categorically fit within the five clusters described above, with little ambiguity as to which category may be appropriate.

These categories of information behaviour represent the clusters of common information behaviour scenarios described by the participants. Some occurred more frequently than others, however each cluster contains multiple accounts of information behaviour. The identification of these clusters facilitated the analysis of data by breaking a large body of data up into more manageable sections.

The identification of these clusters also facilitated cross-case analysis. The implications for these clusters, and how they related to the components of sense-making, are described below. Each component of sense-making is described, with examples provided from each of the five clusters.

During the data collection process, participants were asked to provide an example of a situation in which information was sought or used to assist them in solving a problem, answering a question, or making a decision. Several examples were given, which varied depending on the participant. The participant was then asked to describe a situation of his or her own choosing. I was able to obtain a *critical incident*; or a situation of critical importance in the perspective of the participant using this data collection method. The nature of the incident selected by the participant provided clues as to what types of activities are perceived to be critical or important

according to the participant by virtue of being selected by the participant. The information behaviour incidents described by participants were categorised to simplify analysis and coded as discrete units of analysis. The categories were developed based on the domain of the participant's life to which the information behaviour was relevant.

Table 13 below summarises the number of incidents reported in each cluster, with regard to the overall number of incidents.

Table 13 - Clusters of information behaviour and number of information incidents described

Cluster	Number of incidents	% of total incidents	Ages of participants
Consumer information behaviour	10	19.2%	27 to 52 years old.
Professional information behaviour	11	21.2%	20 to 62 years old.
Educational information behaviour	6	11.5%	18 to 42 years old.
Recreational information behaviour	20	38.5%	18 to 52 years old.
Health information behaviour	5	9.6%	28 to 62 years old.

These figures are explored in the following sections, in greater detail.

4.1.2. Sense-making activities in interviews

As data was gathered using Dervin's (1983, 1992, 1999, 2008) SMM, it follows that the data would be examined using Dervin's Sense-making theory of information behaviour as an overarching framework for analysis. This was accomplished by identifying the phases or components of sense-making activities in each individual account of information behaviour.

The analysis revealed that Dervin's components of sense-making were a useful tool for identifying the information behaviour of individuals in Laos. Individual accounts of the sense-making behaviours and their implications are described below.

Situation

As described in section 3.3.3, *situation* refers to the history, experiences, horizons, constraints, barriers, habits and skills unique to each individual and each sense-making situation (Dervin, 2008, p. 17). How individuals perceived and articulated their situations varied considerably, and is indicative of a number of important aspects of information behaviour.

Situations described ranged from those with no previous experience in the area of their information situation or information need, to those with extensive expertise. Interviewees came from a variety of different professional and educational backgrounds, and thus each situation was unique.

Capturing the unique situation in which the sense-making behaviour commenced was a key aspect of the interview process, as this phase of sense-making provides many important clues as to the contextual factors surrounding the information behaviour under investigation. The following interview excerpt demonstrates how previous experiences affected the situation component of the participant's sense-making behaviour.

Nicole: So, can you tell me about your situation and step by step what happened?

Sao: When I saw the job announcement on TV, I asked my teacher how to apply for it, he told me you should write a CV, to apply for it, and the teacher suggested to me how to write one.

N: So at that time did you have any experience in the past of looking for a job?

S: No I don't have experience.

N: So you never looked for a job in the past?

S: No.

A number of situational factors emerged as playing a key role in information behaviour. The most obvious were related to the individual's level of experience engaging in similar information behaviour in the past, as described by the interviewee above. Individuals who had little experience engaging in information behaviour in similar situations often had less effective overall information behaviour. Individuals with previous experience were more likely to describe sense-making journeys that were more straightforward and involved less uncertainty or barriers to information than those who had no previous experience in their given situation. However, other situational factors including also played an important role in defining an

individual's situation. Some examples of situational factors reported by interviewees are summarised in Table 14 below.

Table 14 - Additional situational factors

Situational factor	Interviewees reported age influencing their level of experience and sense-making situation	Interviewees reported their sex or gender roles influencing their sense-making situation	Interviewees reported education levels influencing their sense-making situation	Interviewees reported socio-economic status influencing their sense-making situation
Example	"Because he is older, he knows about everything, if it's good or not good. So I am young, I don't know anything."	"Women always diet non-stop. "	"Countryside it's always like low education."	"My wife is poor, and [my father] is afraid that maybe I get trouble in the future."
Influence	Interviewee sought information from those he believed had more knowledge	Interviewee went on to seek information regarding weight loss.	Interviewee preferred not to seek information from her neighbours.	Interviewee's situation was constrained by the prejudice of his family.

Throughout Dervin's work *situation* is described as "history, experiences, horizons, constraints, barriers, habits and skills". The relationship between an individual's context and his or her history, experiences, horizons etc. is evident on both an apparent level and an embedded level. The individual's social and cultural environment plays a critical role in determining his or her life's experiences and personal history. An individual who was raised in Southeast Asia will have a very different *situation* or starting point for sense-making than one who grew up in Wellington, New Zealand. It is in this particular unique situation that the perception of a knowledge gap occurs which stimulates the sense-making behaviour.

However, in addition to the obvious ways in which contextual factors may influence an individual's past experiences, and personal history, lies the deeper cognitive environment of the individual, which from birth is trained to think in certain patterns common to an individual's social and cultural environment. These underlying assumptions about the world, knowledge, people and information are less tangible though equally influenced by an individual's context.

Gap

The individual's *gap* in knowledge or his or her "question" is often the impetus for the sense-making behaviour.

As with the situation, how interviewees articulated their gap in knowledge or question varied considerably. However, the variations in how individuals identified and articulated their gaps are actually indicative of how the interviewee perceives the world around him or her, how he or she interacts with information in this world, and the contextual factors that influence information behaviour.

Interviewee's descriptions of the *gap* in their knowledge formed the basis from which clusters of information behaviour were identified. These were used in conjunction with analysis methods that Dervin suggested were more effective, such as the use of *verbings* (Dervin, 1998, p. 42). The following interview excerpt provides an example of how the gap in knowledge was identified in interview data:

Nicole: What question did you ask yourself, or what question were you thinking in your mind at that time?

Siphok: You know at that time I ask myself, why don't I try? I just think oh, I'm afraid that I can't do. You know how many people apply for AusAid scholarship? There are thousands people, and I said ohh and I thought that my knowledge is just a little bit, it seems like...to use Lao idiom, the amount of my knowledge is like a turtle's tail, it's very small. So how can I do it? And then I say that, I don't know, my age, is not decreasing, it's just going up and up and up, I have to do it, I have to do it now, I said.

N: So, what questions did you... what information did you want to find at that time?

S: Umm, the information that I want to get at that time, is I want to get the suggestion how to apply this scholarship.

In most cases, as above, participants seemed to have a good awareness of their information needs, or the underlying gap in their information that necessitated information behaviour. This could be due to the fact that they were asked to report on incidents in which they used information, therefore, participants would have a clear idea of the information they used and what they needed it for. However, it may not always be the case that an individual has an awareness of their information needs.

In some situations, the information gap or underlying question was less explicit, and participants had more difficulty articulating their information need. One example is the participant who was looking for information on coping with stress and meditation. She engaged in a variety of information seeking behaviours to resolve her underlying information need, but when asked about her situation, her description does not make explicit mention of a question or gap.

Saosam: At that time it's kinda hard, with the economy and raising the family and working hard and stuff. I have a hard time to go see the doctor because it costs a lot of money, and then I met somebody that they suggest me, learn how to meditate, to help me.

The above quote illustrates the participant's underlying problem; dealing with stress; however this quote also demonstrates the difficulty she had in articulating this problem as a question. She went on to describe how she addressed the problem through information seeking, however she never explicitly phrased her problem as an information need.

The participants' ability or lack thereof to articulate their information needs is closely related to his or her context. Details regarding this relationship, and more examples, are provided in section 6.1.

Sense-making

Interviewees' descriptions of activities that included verbs such as "searching", "going", or "asking" are all types of sense-making behaviours that referred to strategies individuals used to

respond to the gap in their knowledge. These *verbings* helped identify important information behaviours that occurred in participant's descriptions of activities.

The majority of interviewees in all clusters reported "talking to friends", "getting advice from family", or "discussing with my colleagues" as verbs used to make sense of their situation. A number of interviewees also reported "checking the internet", "searching Google", and "reading the newspaper" to resolve their information need.

As mentioned above, initial results indicated that the participants had a strong preference for interpersonal information sources, and habitually sought and used information from sources with which they had previous experience. These conclusions can be drawn from analysis of the number of incidents reported, the formats of information consulted, and descriptions of the participants' previous experiences. One individual reported:

Nicole: If you have a question or you want information, what is the first thing you do?

Sipet: My friends. Ask my friends.

Similar comments by other participants indicated that this preference held true across nearly every information behaviour incident. In most cases, only if no interpersonal sources of information were available would an individual seek other formats of information. While use of information in electronic formats did seem to be increasing amongst younger populations, the reliance on interpersonal information was still considered paramount in most information behaviour incidents. Participants indicated that this was generally due to the level of trust they had in interpersonal sources of information.

As mentioned above in section 2.2.4, people follow habitual patterns in seeking everyday information. As described by Harris and Dewdney (1994), the participants preferred to seek information that was easily accessible, and they preferred interpersonal sources such as friends, relatives, or co-workers rather than from institutions or organizations in most cases.

The reasons behind these preferences are also closely related to contextual factors. This relationship, and evidence from the data that illustrate it, are described in greater detail in Chapter 6 .

Bridge

Interview data were examined to identify evidence of what Dervin calls the *bridge*; the ideas, attitudes, beliefs, values, and other cognitive and experiential factors that may influence individual's sense-making behaviour. Individual accounts of various types of bridges were critical to determining the nature of information behaviour in the context under examination.

The following table provides an overview of the characteristics of the three broad formats of information described by the participants. The participants' decisions to use certain formats and sources of information over the course of their sense-making activities was affected by the contextual factors influencing their overall information behaviour.

Table 15 - Formats of information

Format of information	Description
Interpersonal information	Interpersonal information refers to information received or transmitted orally, from one person directly to another. Information in this category was transmitted in face-to-face interactions, via a telephone, or through the assistance of a networked device. The individuals who received or transmitted the information were generally members of each other's' personal social network, including family members, friends, colleagues, and acquaintances. Other interpersonal sources of information include health care professionals or the staff of a shop or business.
Printed information	Printed information refers to information transmitted in an analogue written format. This format could include books, newspaper, magazines, and brochures, in any language understandable to the participant. Printed information was produced by corporate entities, organisations, or individuals not personally known to the participant.
Electronic information	Electronic information refers to information transmitted via an electronic device, such as a TV, radio, or through a networked device such a computer or smartphone. Electronic information was produced by corporate entities, organisations, or individuals not personally known to the participant, and can be oral or textual, in any language understood to the participant.

In every situation, participants reported using a number of different resources to bridge one information need or gap. When individuals consulted informational resources, these resources fell into three categories; interpersonal information, printed information, and electronic information. These formats of information are described in greater detail below.

While every situation described involved the use of multiple sources of information, not all involved different formats of information. Therefore, it is important to make the distinction between information source and information format. Format refers (e.g. electronic, printed, interpersonal) to the type or category of resource, source refers to a single specific resource, which could refer to a printed document, resource person, electronic record, or another type of single resource.

In general, a few conclusions can be reached based on the bridges reported in all categories. Interviewees expressed their preference for interpersonal information with statements such as "talking is better than reading". Others expressed their values and attitudes by making statements such as "I like to work with the English guy". These are just some examples of how an individual's ideas, beliefs and attitudes can affect how an individual would interact with information. These types of statements have far-reaching implications for information behaviour, however it is difficult to develop an understanding of the underlying factors that compel an individual to form these types of beliefs.

The most common sources of information included family, friends, TV, and the Internet. Other sources of information described include teachers, staff of a shop or business, radio, newspapers, magazines, health care professionals, colleagues, books, brochures, noticeboards and religious advisors such as Buddhist monks and nuns. The information participants used to resolve their information needs was transmitted primarily in three principle languages: Lao, Thai and English. Information in other languages, such as Vietnamese, was also used by some participants, though this was not common. The following interview excerpt provides an example of how participants described bridges in their information behaviour incidents:

Saosi: Mainly I like reading magazines, and I like very much reading the articles from Internet. Sometimes I like reading books with a story, historical books talking about history.

Nicole: Lao history?

S: Yes Lao history.

N: You mostly read in Lao or Thai or English?

S: Well for Lao history I read in Lao, but for another article or other information I like reading in English, because I like to practice in English.

N: How about Thai?

S: Sometimes I read Thai, but I prefer in English. Because I can speak and write Thai, and I understand everything Thai, but practicing English is better.

As described in section 3.3.3.5, not all bridges involved the use of external information. The participants' use of non-informational bridges included descriptions of reflective observations or the memory of past experiences to guide them across a gap in knowledge. The following interview excerpt provides an example of how both informational and non-informational sources were used to bridge a gap in knowledge.

Saojet: Sometimes I get it from my friends' advice, but mostly I like finding out something new, like when I hear the music on somewhere, I like it, in a restaurant or something, I think ok, I should try this one.

Nicole: How about for hairstyles, how do you learn new hairstyles?

S: Just observing, like when I go to a wedding party, I just recognise how to do it.

Other interviewees described making decisions based on feelings, or instincts, rather than information they had gathered. The following interview excerpt provides an example of this kind of non-informational bridge, in which the interviewee makes a decision to leave a job based upon her feelings and observations, rather than informational resources.

Nicole: So at that time when you decided to leave, who did you talk to?

Sip: Just only my sister, but before my friends who work at the same place told me I should leave.

N: So at that time what was your question? Should I leave my job?

S: I didn't ask anyone any question, just leave. I used to work with foreigners, so I understand the system and know the way to work with them, so after the Chinese took control, I wanted to leave.

N: So when you left there what was your question?

S: My question was, should I stay or should I go? Because I don't like the Chinese system.

N: So what did your sister tell you?

S: It depends on you, my sister said.

N: What did your friends tell you?

S: My friends didn't give me any advice because they already left before me. My friends already work the same position so I already know what's going to happen, like if we stay nothing is better, so nothing will improve. My friend didn't say anything, I already knew I was going to leave.

N: But how, how did you know?

S: I asked myself the question why should I stay, because work is not good anymore, and new people coming, old people leave. My feeling is that it won't be good anymore, so I just left and came to work in this shop.

Other interviewees also reported "just knowing" or "my feelings" as helping them to make a decision, though informational resources such as advice from other people were also used to bridge the gap in knowledge. This interview represented the sole example of an interviewee relying principally upon non-informational resources to bridge her gap in knowledge. While this interview therefore does not contribute a great deal to our understanding of information behaviour in Laos, the contextual factors affecting the interviewee's sense-making activities are still embedded within the account, and therefore through the use of discourse analysis, this incident can still contribute to our understanding of the contextual factors in Laos.

Examination of the bridges used by participants to resolve their information needs showed that participants did not always seek the most effective or efficient information sources to bridge their gaps. Further analysis revealed that participants believed certain sources of information were less relevant to their local context, and that interpersonal information sources were more trustworthy. The contextual factors that influenced how individuals selected information sources are described in greater detail in Chapter 6 .

Outcomes

In information behaviour, *outcomes* generally refer to how the information was used and whether or not it resolved the underlying information need. Dervin describes the outcomes as relating to "helps" and "hindrances" in the sense-making activity. However, how people interpret, evaluate and come to conclusions regarding the information they encounter during their sense-making are also a part of the outcomes of the information seeking behaviour.

A number of helps and hindrances to information behaviour were reported by interviewees. Access to the Internet appeared to be a significant help in most situations, and one respondent indicated "I used to use the newspaper, but now, for everything, I go to the internet". Hindrances included a lack of access to resources, such as libraries or print material.

Outcomes varied by cluster of information behaviour, and by the individual's level of comfort with information practices. Individuals who had more experience seeking information, better access to information resources, and were more confident in their information practices had more positive sense-making outcomes. For example, one interviewee was looking for consumer related information related to the purchase of a new laptop for his father. The interviewee had previous experience seeking similar information in a similar situation, and therefore experienced few hindrances when engaging in sense-making behaviour. According to the participant, "Finally I got [a laptop]. I am happy, [my father] is also happy". The individual in question was able to draw on information from a variety of sources, including the newspaper, advice from a friend, the internet, a shopkeeper, and his own past experience to resolve his information need efficiently and effectively.

Interviews revealed that individuals who had less access to resources and less well-developed information practices experienced less positive outcomes. For example, an individual who had limited access to information resources had less successful outcomes when seeking health related information. One interviewee described her experiences seeking information related to failing eyesight, and was only moderately satisfied with the outcomes, saying;

Saobet: Yeah the medicine helped, after I took the medicine, I feel like a bit better, not really big thing, but small.

Nicole: So how do you feel now?

S: Just normal. It's just normal feeling, because I'm sick, but I hope it will be better, I hope I can see like before. I don't want to bother my family.

This interviewee relied solely on interpersonal information sources, which may have had an impact on the overall informational outcomes. Resources such as printed materials and the Internet were available, however the participant did not have previous experience using the internet, and printed resources were less easily obtainable. The context of the interviewee

influenced her decision not to consult resources other than interpersonal information. This kind of choice may be related to factors identified by Chatman as indicative of "Information poverty", described in section 2.2.5.2.

4.1.2.1. Evaluation of information

Dervin's SMM does not give specific attention to evaluating information, but rather regards it as an embedded process conducted at each step of the sense-making journey (Figure 8, page 42). As Savolainen (2006, p. 1124) suggested, examining how individuals evaluated information is generally a feature of traditional information behaviour research design, whereas SMM provides the researcher with a set of heuristic tools that can be used to discover how individuals interpreted and interacted with information. While Dervin's methodology does not identify the evaluation of information as a unique or independent concept requiring investigation, during data analysis the identification of how individuals evaluated information did emerge as being a useful tool for examining their sense-making behaviour. For this reason, special mention has been given to how individuals evaluated information.

Information was often evaluated concomitantly as it was found, used, and applied. Often, if an individual had a positive sense-making outcome, he or she would therefore conclude that the information he or she had encountered was useful, accurate, reliable, or fulfilled their information need in some way so as to form a positive evaluation of the information. For this reason, how individuals evaluated information was often articulated alongside descriptions of the *outcomes* component of the sense-making metaphor. However, it is important to conceptualise the evaluation of information as taking place at each step in the sense-making journey.

Participants had different ways of describing how they evaluated the information they used. In most cases, simply the fact that it came from an interpersonal sources that was known to them indicated that information was reliable, trustworthy, and accurate. However when participants were dealing with salespeople, staff in shops, or information on the internet they were aware of the potential to come across inaccurate information. In one situation an individual described his experience with asking for advice from a car salesperson using the following metaphor:

Bet: I think about as marketing job, you don't trust people easy. You know like commercials and advertising.

Nicole: Why don't you trust it? You think they want to sell the product?

B: I think so, just like when you go to bakery shop, 'Which one is delicious?', they will tell you all is delicious.

How individuals evaluated information revealed a great deal about their information behaviour. Findings indicated that those who had more effective information skills often were more critical when evaluating information sources. Participants who were able to resolve their information needs efficiently had little difficulty describing why they did or did not feel confident in the information that various sources provided them. Those who had greater difficulty articulating why they did or did not feel confident in trusting the information from a certain source often had greater difficulty in resolving the underlying information need.

4.1.3. Summary of sense-making findings

The components of sense-making described by Dervin provided a framework from which analysis could identify significant elements of human information behaviour and examine these types of behaviours and activities more closely. The picture of sense-making and information behaviour that emerged, while similar to the information behaviour that occurs in Western societies, has some striking differences as well.

The most significant differences include how individuals articulated their information needs, sought information, and what kinds of preferences they displayed for various types or formats of information. These activities included the processes in which individuals evaluated information for relevance and authority, and how that evaluation influenced their use of the information.

4.1.4. Sense-making components summary by cluster

Table 16 below provides a summary of the sense-making activities under investigation, and examples of each type of sense-making component organised by cluster of information behaviour.

Table 16 - Summary of sense-making by cluster

	Situations	Gaps	Sense-making	Bridges	Outcomes
Consumer related information behaviour	Ranged from no previous experience buying motorbike, car, laptop, etc. in the past, to extensive experience. Considerable variation resulting from participants' different professional and vocational backgrounds.	Gaps reported related to making a major purchase. Questions or confusions described by participants in this cluster included "Is everything suitable?" and "The quality and performance of the car, is it good?"	Accounts of sense-making activities included descriptions of <i>verbings</i> such as "Looking at the price, comparing the information", "Going online, searching the internet", "Consulting with a relative", "Talking to friends".	Bridges included newspapers, the internet, brochures, and advice from friends and family. Interviewees reported bridges such as brochures and advice from friends.	Outcomes included making decisions, purchasing items, and feeling happy or satisfied overall. Participants described feeling happy with their information behaviour and decisions.
Professional related information behaviour	Ranged from no previous experience in the area, to extensive experience. Interviewees came from a variety of different professional and vocational backgrounds, and described topics such as job-seeking, opening a business, or vocational skills, and thus each situation was unique.	Questions related to job-seeking and professional opportunities, some gaps indicative of confusions included "I want to earn my own money.", and "I want to find a job."	Related to questions related to job seeking or vocational skills, accounts included descriptions of <i>verbings</i> such as "searching the internet", "reading the newspaper", and "talking to friends".	Bridges included newspapers, the internet, talking to friends and family as in other clusters. Individuals reported behaviour such as reading an "advertisement in the newspaper" or similar bridges.	Outcomes included evaluating information, finding a job, or opening a shop. Confidence in information, such as "I trust the information the manager gave me.", was one reported outcome.
Educational related information behaviour	Most interviewees had little experience in the specific situation they described. Each account was related to a different aspect of educational information, such as selecting a programme of study or applying for a scholarship, thus each situation was quite unique.	The gaps described individual's overarching questions or confusions regarding educational situations and opportunities. This included information related to enrolling in university, selecting a course of study, applying for scholarships.	Questions related to applying for scholarships or enrolling in university. Included descriptions of <i>verbings</i> such as "Going to the office, asking government officials", "Getting advice from friends", "Going to the university", and "Talking with teachers".	Individuals described people such as friends, family, and teachers as bridges. One interviewee described a bridge in which he talked with a teacher about "how to apply to get the scholarship to study in the US".	Outcomes included successfully applying for scholarships, participating in a group course, and enrolling in university. Confidence was an outcome, for example "I see that when I follow his information, I see that I can succeed in my goal. I can reach my goal."
Recreational related information behaviour	Ranged from those with no previous experience in the area, to those with extensive experience. Incidents in this cluster described information behaviour related to hobbies, travel, sports, music, and other recreational activities.	Questions related to personal interests and hobbies, including information about sports and weather.	Accounts included descriptions of <i>verbings</i> such as "Watching TV", "Searching the internet", "Asking neighbours" and "Reading magazines".	Incidents described bridges including friends, TV, internet, family, and shopkeepers. Accounts included descriptions of how TV was the primary bridge, however "If there is no news, maybe go online. It's quicker."	Outcomes included getting news, learning to play guitar, and organising a football team.
Health related information behaviour	Most participants had little previous experience with similar information behaviour in the health-related situation they described.	Overarching questions or confusions regarding health issues such as weight loss, coping with stress, and medical issues such as weight loss and skin problems.	Accounts included descriptions of <i>verbings</i> such as "Asking the doctor", "Going to the temple", "Getting advice" and "Visiting a clinic".	Bridges include family, friends, doctors, and monks. One interviewee reported "checking the information" in a clinic and talking to a doctor to bridge her information gap.	Health issues such as stress were resolved, as one participant describes "Meditation helped you resolve that problem?//Oh yeah, 99%. For me."

4.1.5. Summary of everyday information behaviour in Laos

Findings in this area revealed that participants generally preferred to use interpersonal sources of information to resolve their information needs. Printed materials and electronic materials were consulted in equal numbers; though as distant second alternatives to interpersonal information.

The participants revealed that they generally did not have extensive experience engaging in information behaviour in situations similar to the ones they described. The lack of experience may be related to their choice of the situation as a critical incident; as the situation was unfamiliar to them it may have been more memorable.

Overall the most unanticipated findings to emerge were the participants' avoidance of certain information sources or reliance on less effective sources of information in some situations. Through in-depth exploration it emerged that the participants' reasoning for selecting certain information sources and avoiding others was largely contextual. There appeared to be a belief that certain sources of information were less relevant to the local context, and that interpersonal sources were more trustworthy. The implications of these findings are described in Chapter 7.

4.2. Contextual factors in Laos

In this chapter I describe how I interpreted the data in phase two of my analysis in order to address my research questions, and provide some descriptions and explanation of how the research questions were addressed.

As mentioned in the introduction, Chatman (2000) found that "human information behaviour is a construct in which to approach everyday reality and its effect on actions to gain or avoid the possession of information. The choice to decide the appropriate course of action is driven by what members' beliefs are necessary to support a normative way of life." (p. 14). Therefore, data analysis was undertaken with the aim of revealing the underlying contextual factors contributing to a "normative way of life" in a non-Western society, and how they influenced information behaviour amongst the participants of this study.

4.2.1. Identifying contextual factors

Gee's discourse analytic method was used to interpret the data and identify contextual factors affecting information behaviour amongst participants.

Gee (2011b) suggests that not only what a speaker says, but also how he or she says it, helps reproduce context, and create or shape what the listener understands to be the relevant context (p. 85). By examining a piece of language we can begin to identify these contextual factors, using the discourse analytic method. According to Gee (2011b),

We continually and actively build and rebuild our worlds not just through language, but through language used in tandem with other actions, interactions, non-linguistic symbol systems, objects, tools, technologies, and distinctive ways of thinking, valuing feeling, and believing (p. 88)

Gee (2011b) goes on to assert that whenever we speak, "we always and simultaneously build one of seven things or seven areas of 'reality' (p. 88).

The seven building tasks identified by Gee (2011a, 2011b) are:

1. Significance
2. Practices (Activities)
3. Identities
4. Relationships
5. Politics (the distribution of social goods)
6. Connections
7. Sign Systems and Knowledge (Gee, 2011a, p. 17-20)

The seven building tasks, and examples of interview data related to them, are described below. Through the interpretation of the language captured in interview data a number of contextual factors emerged as having key roles in constructing reality for the participants, and provide evidence of many of the contextual factors affecting information behaviour. These contextual factors that emerged as playing a critical role in information behaviour are described in greater

detail in the following sections. The use of the discourse analytic method permitted a greater depth of investigation into the interview data, and enabled the identification of embedded contextual factors that may have otherwise not been explicitly described by participants during data collection.

This greater depth of analysis revealed a number of commonalities in the data. These commonalities are described below, organised according to the relevant building task of language. Examples from the interview data that provide evidence for the interpretation and identification of relevant contextual factors are provided for each building task.

4.2.1.1. **Significance in interview data**

As described above, the language used by participants rendered some subjects of their discourse significant, lessened the significance of others, and signalled to others how the participant viewed their significance. Gee (2011a) suggests looking at a portion of an account and asking “How is this piece of language being used to make certain things significant or not and in what ways?” (p. 17). The following account provides an example of how language was used to de-emphasise the significance of an unusual circumstance in the Lao context.

Nicole: Are you married or single?

Sipha: No just engaged.

N: So who do you stay with now?

S: In fact I rent my private house and live with my fiancée.

N: Wow, you live together but aren't married yet?

S: Yeah look like Western style.

N: Is that unusual in Laos?

S: Yes, basically only fiancée here, it means wife, but we have a plan in the future to get married.

N: So in Lao, if you have an engagement basic ceremony...

S: According to the culture, we call in Lao, there are 3 groups, ethnic groups, Lao Loum, Lao Soung and Lao Toung. I am Lao Loum, but my fiancée is Lao Toung.

N: Oh, ok, so according to your culture, after you get engaged, it's ok to stay together?

S: Yes, because now Lao people are influence by Western culture.

N: But in the past, you have to get married before you can stay together?

S: Yes

N: So when you get engaged, what do you do, have basic ceremony?

S: No, we do according to Lao culture.

N: What do they do?

S: Just make a small party, and gather elderly people in the village, for being witness

N: So after that, then the village knows, ok, you plan to get married, ok, you can stay together?

S: Yes

N: So where is your hometown?

S: Here in Vientiane capital

N: How about your fiancée?

S: From province, Phonsaly province.

N: Ok, Northern Lao.

S: Yes North

N: How did you meet each other?

S: Oh, after graduation I meet her, I work for NGO [non-governmental organisation] at Phonsaly district and I met her.

N: So what did your family think when you told them you want to get married with Lao Toung?

S: To be honest with you, my mother she agree with us, but my father not agree, he quite disagree up to now. So that's why I rent the house.

N: So your parents live in Vientiane?

S: Yes, before I rent a house, I live with my parents.

Here the interviewee is describing a serious family rift. Some of his family does not accept his relationship with a member of the ethnic minority, and therefore, he has been forced to leave his family home. This would probably be considered a very emotional, significant event by most Western standards. However, the language Sipa uses to describe his estrangement from his family is almost indifferent. It is only through probing that he reveals more about his situation; otherwise his language does not suggest the views the circumstances as significant enough to merit further discussion. On the other hand, you can see from my language how significant I found the disclosure of his engagement and independent living situation. My initial response of "Wow"; as shown in the interview transcript above, demonstrates my surprise. This type of living arrangement is very uncommon in Laos, and I had until that point never known it to be practiced by Lao people.

Another example, from the first interview I conducted, provided further evidence for the general de-significance Lao people placed on what I considered substantial occurrences. The interviewee was describing her feelings regarding the lack of financial success her business had been experiencing.

Nicole: So how you feeling now? Happy, sad, anxious, nervous?

Nung: I'm not worried

Nicole: Not worried?

Nung: Yes not worried because this restaurant just opened 1 year, and now it's the low season, and even though not many customers maybe in the next year or year after, if no customers then I'll start to worry. Also I'm not worried because this is my own place so I don't have to pay for rent and no payment for everything like...

Further probing revealed the business was failing and they had invested an extensive amount of money and time that stood to be lost, which would have had grave implications for her entire family. Despite this, Nung did not place a great deal of significance upon the lack of customers or success the restaurant was experiencing. Her language and choice of words essentially de-emphasised this significance of the lack of business success in her conversation with me.

These examples illustrate the building task of constructing one “area of reality” (Gee, 2011a) through the use of language; the area related to significance. As described above, participants’ language often illustrated the low level of significance with which they viewed many things. However, some things were described using language that signalled a high level of significance. For example, in a number of different interviews, the opinions of family, friends and relatives were considered very important.

The following interview demonstrates how significant interviewees felt advice and opinions from their families were:

Sipjet: For problems, I like to tell my best friends and father.

Nicole: So can you tell me about some advice your father gave you?

S: My father gives me advice about everything.

N: Can you tell me one question you asked him recently?

S: For the first, when I finished high school, I didn’t know how to choose to study in college, my father tell me it’s law.

N: So when you finished high school, what was your first question?

S: The first question I tell my father, I don’t know what is the best for my future. I think I like to be engineer. But he think it’s not, he tell me, lawyer is good for you. The best.

N: So after he told you that, what did you do?

S: Well I think about it, then I go to study, start law.

N: So how did you feel at that time? Happy?

S: No, the first time, I’m not happy

N: Not happy? Sad, angry?

S: I think I’m sad.

N: Why?

S: Because I don’t like law. But when I study about 1 or 2 years, yes I like it.

N: So even though you felt sad, and you didn't like law, you continued to study because of your father?

S: Yes

N: Why?

S: Because he is older, he knows about everything, if it's good or not good. So I am young, I don't know anything.

This interview excerpt also signals how the participant felt about age, and its significance.

Significance was signalled by various choices of words and language throughout the interview data, and interpreted in order to develop a deeper understanding of how the participants constructed this area of reality, and in turn, how these contextual factors affected the information behaviour of the participants. After examining interview data, and asking how a piece of language was used to make certain things significant or not, several themes emerged as being commonly considered of high and low significance amongst participants.

Certain events, such as the birth of a child, or family dispute, which would normally be considered highly significant in Western culture, were portrayed as less significant than one might expect. Very little interview data included descriptions of sentimental feelings or love regarding other individuals. When participants described their husbands, wives, children, or other close friends and family, they generally used quite neutral language, revealing little about how significant their feelings were for the person they described. This under-emphasis on love was not unexpected, as public displays or mention of affection are uncommon in Laos.

In general, participants did not ascribe great significance to many events, relationships or people, but rather de-emphasised particular significant things. Despite not explicitly indicating the significance of their feelings or affection for those close to them, the participants used other language and words to signal how significant other people were in their lives. Understanding of the extent to which certain events, people, places and things were considered significant was accomplished through closer in-depth discourse analysis. Interview data were examined for

evidence of how people described activities, people, events, places and things with regard to other factors.

The tendency towards de-emphasising particular important events is related to cultural and religious beliefs in Laos. How these contextual factors affected information behaviour is explored in Chapter 6 .

4.2.1.2. **Practices and Activities in interview data**

As described in section 3.3.4.1, language is used to recount activities or practices in which the speaker has engaged. When examining a piece of discourse, Gee (2011b) suggests asking oneself “What practice (activity) or practices (activities) is this piece of language being used to enact (i.e., get others to recognize as going on)? (p. 18).

One example of interview data providing evidence of a sequence of events that are socially recognised and supported was found in the following account in which the interviewee is describing the process in which she engaged to have a water supply connected to her newly constructed house:

N: So everybody has to hire this special guy if they want water?

S: No, only whoever needs it urgently. If you just need it, 2 months, 3 months, you have to do step by step with government, no need to hire another guy.

N: So what do you do, what are the steps if you go to the office, what documents do they need?

S: Basically we will get the documents from the village, like address and send to Department of the Water, then they will have a long queue, processing, and we have to go there and draw the map how to come to my house to make the survey before they make the installation, where to put the tube and how I want to lay out the tube.

N: So before that, the first time when you went to the government office, what happened?

S: The first time, they just keep my documents there for a month, then I keep calling, calling, checking, they never come. They have too many people that stay in the queue they have to go one by one.

N: So when you started building your house and you knew you wanted to get the water set up, the first thing you did was go to the government office to fill out the documents?

S: Yes

N: Did you ask them any questions then?

S: Yeah, I asked them how long it will take, after I send the documents and how much it will cost.

N: Did you ask them what documents you need, or they told you?

S: Yeah they give me the documents.

N: So what did they tell you?

S: They said 2 months, yeah.

N: So do you think that it's accurate, what they told you, 2 months?

S: I think "Why so long?" in my head, but I didn't say anything.

N: So then after that you called to check up on your documents, but after 2 months, no one comes?

S: Yeah never come!

N: So then what did you do?

S: Then I spoke to my friend, and they said "You have to hire the guy, he also used to come and install at my house", and then I called him.

N: So what happened when you called that guy?

S: Yeah he will come, but he will come as his part-time job, maybe 5 pm, after his work.

N: So did he ask for more money than the government office?

S: Umm a little bit more

N: Did you feel like you could trust him? That he will do the work correctly?

S: He said everything he has warranty like 5 years, they are recognised.

(interview 17)

Here the interviewee describes a series of steps in which she engaged in order to have the municipal water supply connected to her new home. She uses language to describe the sequence

of actions she undertook to resolve an issue related to the slowness of government departments. While it's not entirely clear from the interview whether her actions amount to what might be considered solicitation of black market services, it is evident that the endeavour was "socially recognised and institutionally or culturally supported" (Gee, 2011a, p. 17) as evidenced by the support of her neighbours and friends. While the interviewee's description is not necessarily always in chronological order, her language enacts the activities related to initiating the water connection, and the account permits others to recognise these practices as having occurred. In describing these practices, the interviewee is using language to perform a building task of language, in which she constructs her reality in the area related to practices and activities.

Other accounts of practices and activities found in interview data were similarly interpreted to reveal how participants constructed their realities, and what the contextual factors were that affecting how individuals engaged with information in Laos. The interviewee's choice of words signalled that they often engaged in certain sorts of practices and activities. Interview data revealed certain practices as commonly occurring when individuals described their information behaviour activities. The most commonly occurring practices and activities described by participant included communicating with other people. As described in section 4.1.2, this included:

- Talking with other people
- Discussing with other people
- Asking other people questions or for advice

There were a number of other practices considered socially or culturally supported in which participants described engaging in, such as going to the temple or praying. Participants also described applying for scholarships, looking for jobs, and making purchases that involved a series of steps. According to Gee (2011b), behaviours such as this constitute "activities"; that is events that occur once, perhaps over a period of some time, but are not on-going. For example, going to the temple on one occasion in order to have a blessing conducted by a monk would be an activity, whereas regularly going to the temple and praying would be considered a practice.

The words and language participants used to describe their practices and activities revealed a great deal about the context in which these practices and activities occurred. Words such as “always” and “usually” signalled that participants engaged in certain activities regularly. Participants’ language also suggests that the practices and activities they engaged in were “socially recognized and institutionally or culturally supported” (Gee, 2011a, p. 17).

Gee (2011a) describes how language used in a discourse to describe practices and activities can “engage in a good deal of social work.” (p. 23). What he means is that when individuals went about “telling a story” (Gee, 2011a, p. 23) to describe how they did something, they reveal a great deal about the social structures that exist that support or conflict with the practices described. Gee (2011a, p. 23) provides an example of how a description of practices provided evidence for developing an understanding of hierarchy and power relations within a group in North America. These same contextual factors revealing complex social structures underpinning “stories” of how people engaged in activities and practices emerged from analysis of the Lao participants’ accounts.

Whether participants were describing regular practices such as buying compact discs and organising football matches, or unique activities such as travelling to China, contextual factors including social and cultural environments affected how they engaged in such practices and activities. The affects of these structures are present and embedded within these accounts (see Chapter 6).

4.2.1.3. **Identities in interview data**

An account will contain evidence of how the speaker constructs his or her own identity, and how he or she enacts the identity of those around them. Gee suggests examining a part of a discourse and asking “What identity or identities is this piece of language being used to enact (i.e., get others to recognize as operative)? What identity or identities is this piece of language attributing to others and how does this help the speaker or writer enact his or her own identity?” (Gee, 2011a, p. 18)

One example of interview data providing evidence of how an interviewee enacts her identity, and the identity of those around her is described in the following interview excerpt:

Siphok: I am a shy person, with a higher person. So that is one thing that makes a problem with me. I cannot cope with that. I don't think that because of other things, I think that because of myself.

Nicole: So in Laos, you respect the people who have higher position than you?

S: Yes.

N: Always?

S: Always.

N: And you feel shy to ask them something?

S: Yes. And when I see a high person, not only me, all people, have to be something like formal, polite, like respect them.

N: Usually if the person is higher than you, are they older than you, or can they be younger?

S: Older, most of them I think older.

N: So, if someone is older than you, you have to respect them and be polite to them?

S: Yes, I think because of culture. One more thing. Not only older people, but older people with high position. We... not only me, all Lao people have respect.

N: So if they are older, then you trust them more than younger people?

S: Not all the time, if in general, it's not all the time. I have to consider, you know sometimes I mean, sometimes other people are not reliable I think, maybe..

N: Why?

S: Um as I say it's not reliable because sometimes they get old but they are not educated people.

Here the interviewee is using language to enact her identity, and the identity of those around her. In this case, language is being used to build an understanding that the interviewee, and according to her, all Lao people, strongly value hierarchy within society as part of their identity, and that position within Laos's social hierarchy is an important part of constructing identity. This excerpt illustrates Geert Hofstede's findings related to the power distance dimension of culture, as described in section 2.3.4.1. The speaker quite explicitly uses language to describe her own understanding of his identity, and contrasts this with people whom she regards as "higher" than her within society. As Gee (2011a, 2011b) describes, the interviewee uses language to attribute

identity to not only herself, but other members of society. The use of language in this manner to enact identities of the interviewee and others is another building task of language, used to construct the “identity” area of reality for the speaker. Identities were constructed through the use of language in a similar manner through the interview data, and these data were interpreted to develop a picture of how contextual factors such as the “identity” area of reality was constructed for the participants, and how this may have had an impact on information behaviour.

The interviewees used language to assign certain characteristics to themselves, and other people. These characteristics revealed how individuals constructed identities for themselves and those around them. Interviewees used language to get recognised as taking on a certain identity or role, or to build their own identity. Some common identities individuals ascribed to themselves included

- High positions, having more power than those “under” the interviewee
- Low positions, having less power than those “above” the interviewee

Participants used different language to describe their relative position to others. For the most part, the participants did not explicitly state their position, but rather described themselves as relative to other people. The identity of the interviewee was therefore less explicit, but inferred through the language used to describe those around him or her.

In the transcript above we see evidence for how the interviewee described herself as lower than another person, using words such as “higher”, and “high position”. Nowhere does the interviewee indicate she is “lower” or, “a low position” than the people she is describing, but one can infer when she described someone as “higher”, she means higher than herself.

Participants also constructed identities for themselves regarding their age, profession, their educational level, or their role within a family. The excerpt above also provided evidence for how age and educational levels play important roles in constructing an identity for the individual and those around him or her. The interviewee, Siphok, above, describes how normally, in Lao culture, respect for those older than you is mandatory. However, Siphok also goes on to describe how it's

not merely age that garners respect, but also education, or wisdom. This association of age with sagacity is common in Asian culture, as described by authors such as Yee (1997).

The role of caregiver or decision maker was also an identity that some participants assumed, and used language to illustrate. The following interview excerpt provides an example of the different identities and power structures that exist within a family:

Nicole: Ok, why was it your responsibility, not you husband's?

Sipet: Umm, my husband works too, but actually when we earn money, we just put it in the same bank. In Lao culture, wives always control the money.

N: Ok so the wife makes the decision?

S: Yes

N: But do you have to consult your husband?

S: Before we are gonna buy the bike, we already talk about this, we have the agreement.

N: What is the agreement?

S: So I asked my husband, "Can we buy this motorbike?", my husband said yes we can, and I explained the reason why I want to buy, so that's why my husband said yes, "I agree".

N: So normally you make the decision about what motorbike to buy?

S: No, together.

N: So, why did you pick it and not your husband?

S: We went together.

N: But who made the decision?

S: Together, so we agree when we see the colour, "Ok, take this one".

N: So when it's for the family, you decide together?

S: Just only me and my husband

N: But like the last time, when it was for you to use, you went and looked alone, yeah?

S: No I went with my husband

N: So you decided together, 50/50?

S: My husband was happy, just agree like 40%, and I have more power, like 60%.

Here we see evidence that the woman or wife in a Lao family often controls the finances and has a great deal of power with regard to purchasing decisions. The interviewee constructed her identity as the decision maker throughout the interview – describing in earlier passages how she sought information regarding the quality and brand of available motorcycles, and ultimately made the purchase. It wasn't until the end of the interview, shown in the above excerpt, that it was revealed that her husband was involved or even present for any of the information seeking, selection and decision making process. Finally she provides a quantitative figure illustrating her role in the purchase; stating, "I have more power". She uses her language throughout the interview to illustrate how she has constructed her identity, and explicitly indicates her perception of her identity in the final line.

This perception of the interviewees' identities was revealed throughout the interview data, and influenced their information behaviour in a number of ways. As described above, contextual factors such as culture had exerted a deal of influence on how individuals constructed their identity, which in turn influenced how they engaged in information behaviour. How these contextual factors affected participants' identities, and in turn their information behaviour, is explored in greater detail in Chapter 6 .

4.2.1.4. Relationships in interview data

As described in section 3.3.4.1, language is used to indicate the kind of relationship we have, want to have, or are trying to have with various other people or groups. An account will contain evidence of these relationships, and Gee suggests examining a piece of discourse and asking, "What sort of relationship or relationships is this piece of language seeking to enact with others (present or not)? (Gee, 2011a, p. 19)

One example of interview data providing evidence of how language was used to signal the kind of relationship existing between the speaker and salespeople in a car showroom is provided in the following interview excerpt:

Nicole: So the staff, what did they say and how did you feel?

Bet: Well, I felt it's useful. If the information they provided to me matches the information from the Internet I feel good. I think they are telling the truth, but if the information is not the same as the Internet I think about this.

N: So which one would you trust more if it's different, the staff or the Internet?

B: As my experience you know I don't trust people in the showroom, because in Laos we still lack, education people to work in this kind of things, and mostly some of them can't answer my questions about the car, so I think that they are not professional enough to provide me with information so I trust the information from the internet

N: Ok, so, I know you already mentioned the showroom staff that couldn't answer your question correctly, at that time, did you get any other information that maybe wasn't good, or some incorrect answer, something like that?

B: Ok, about the engine, they told me, "This engine is 2000" and I thought to myself, "It's 2011, it should be year 2011 engine"

N: So who told you that?

B: The staff of the showroom, so I asked them "So this is the latest years engine's model?" They said "No, next month we're gonna have 2005 engines coming" and I thought "What!? This year is 2011, why 2005 is the most latest engines?" I don't have any ideas for that.

N: So how did you feel after that?

B: Oh, I feel very annoyed. "You are staff here, if you don't know, how can I know?"

N: That was in the Hyundai office, but you still bought Hyundai anyway?

B: Even though because I have a lot of information from the internet, so even though they can't answer my question, so I ask Google, and if Google can answer my question I still buy.

N: So was the staff wrong about the engine?

B: I think he wasn't wrong, but he didn't know about the information, and his friend told me, "He doesn't know".

N: So that is frustrating?

B: But I think in Laos it's ok, we understand each other

This interview excerpt illustrates how the interviewee has used language to describe the relationship between himself and the staff of the showroom. This excerpt also provides an illustration of how the interviewee used language to enact his identity and the identity of those around him, as described above. The interviewee's choice of words reveals that initially, he expected to have a traditional customer relationship with the salesperson, who he expected to have had more insider knowledge about the vehicle than himself. Initially his tone was deferential when enquiring after the car, however, when the salesperson inaccurately responded to his question, he nearly denigrated the staff with his choice of words. This language suggests that the relationship has degraded from that of the traditional customer and salesperson to a relationship in which the customer is aware that he is better informed than the salesperson. This interview passage provides evidence of how the interviewee enacts relationships with those around him, and uses language to construct the *relationships* area of reality for himself.

Other interviews also provided similar data describing relationships, and interpreting the language participants used to describe these relationships resulted in a deeper understanding of this area of reality for the participants, their context, and how this in turn may have affected their information behaviour. The interviewees used language to signal what sort of relationship they have, want to have, or are trying to have with other people, groups or entities with whom they communicate, revealing the nature of the relationships, many of which were similar across the majority of interviewees, such as familial relationships, and relationships between older and younger people.

Participants often indicated that family relationships were very strong. Their language indicated a deep bond between husband and wife, mother and child, and to a somewhat lesser extent, father and child. Other relatives were also described using language that indicated a high level of importance in the participants' lives.

A number of participants also described their relationships with entities and organisations, including businesses, schools, and the government. These relationships were often described using language that indicated a favourable relationship, though certain relationships were described in such a way that indicated an adverse relationship.

The relationships enacted through the language used by participants revealed a great deal about the contextual factors present in Lao society, and how they affected the ways in which individuals chose to engage with information.

4.2.1.5. **Politics in interview data**

As described in section 3.3.4.1, language provides signals as to the speaker's perspective on the nature of social norms and the distribution of social goods. Gee (2011a) suggests examining a piece of discourse and asking "What perspective on social goods is this piece of language communicating (i.e., what is being communicated as to what is taken to be "normal," "right," "good," "correct," "proper," "appropriate," "valuable," "the ways things are," "the way things ought to be," "high status or low status," "like me or not like me," and so forth)? (p. 19)

One example of interview data providing evidence of how language was used to communicate the speaker's perception of "normal", "the way things are", etc. is provided in the following interview excerpt describing the media in Laos:

N: So, what about if something happened, like the government did something wrong, do you think they would report it on the Lao news?

Sipsam: I think, maybe you know as well, Lao is communist, so everything bad, and has effect on the government system, they don't report or review, just say "OK, nice nice nice".

N: Like...no problem?

S: No problem. That's one reason why I don't want to watch the news, they just say it's good, the entire country, no problem.

N: How does that make you feel?

S: Maybe because of my experience, I work for development, I know the conditions for the rural areas, but when I see on the news they say improvement because of good government policy, it makes me feel upset.

N: Because you know it's not the truth?

S: Yeah actually everyone knows. You know we say café coffee, we can talk openly, but not for officials, be careful, just joking with each other.

N: So do you feel like hopefully that the situation will improve in the future?

S: I think it will take quite a long time, but will be better. Now I see some program, like before they never discuss, but now the report like when there is the crime, like social crime. They never discuss before, but now they have the programme from the ministry, they discuss it. But before, they say, "Oh, ok, no crime." Not no crime, but they don't talk about it, and we don't know, but now, ok.

N: So maybe you feel positive about the future?

S: Yeah, positive, but not for sensitive story, especially related to the government.

N: You don't think it will change?

S: No, it will take a long time.

N: But, there are lots of people like you, and your classmates, who I think agree with you, and many of them work for the government?

S: Everyone knows. Just waiting... eventually it will get better.

This interview excerpt illustrates the perspective of the interviewee with regard to social norms in Laos, and the censorship of the media. The interviewee uses language to express his perspective on media, and what is taken to be "normal," "right," "good," "correct," "proper," "appropriate," "valuable," "the ways things are," as described by Gee (2011a, p. 19). While the interviewee's language makes it apparent he does not approve of the censorship of the media, he understands that it is "the ways things are" in Laos, and only hopes the situation will improve in the distant future. This perspective which is somewhat fatalistic in nature could be indicative of cultural values related to religious beliefs, as described in section 6.2. In this passage the speaker demonstrates how he has used language to construct the area of reality related to politics.

In examining the language participants used in interview data to describe politics, social norms, and “the way things are”, a better understanding of the contextual factors related to this area of reality emerged, providing insight into how they affect the information behaviour of the participants. The interviewees used language to convey a perspective on the nature of the distribution of social goods and to build a perspective on social goods. After examining interview data, and asking how a piece of language was used to convey a sense of how social goods were distributed, several themes emerged as being commonly considered “fair”, “correct”, and “the way things are” amongst participants.

Other language used by participants suggested that certain social norms also affected how participants engaged in information behaviour. The following excerpt provides an example of family politics at play:

Nicole: Did you ask any of your friends or family for advice? Did anyone give you any suggestions?

Bet: For advice I asked my friends who use Hyundai too, and then I will ask my father and mother, you know because they don't have any knowledge about car just to give them an overall idea about which one they think is more interesting.

N: So you did ask them?

B: Yep

N: Even though they don't have experience?

B: Yep you know you ask someone who doesn't have any ideas but sometimes they can give you some ideas which you can use as your you know, analyse thinking

N: Do you think that even though, for example, they don't have experience in buying a car, normally, Lao people always ask their parents because they are older people and they respect them?

B: I don't think so.

N: You don't think so?

B: No, I ask my parents because I want to show respect to them, but I don't use their advice.

N: You don't use their advice? But you ask them anyway?

B: Yep

N: You think other people also ask?

B: I think so but I'm not sure whether they ask for advice or just let them know, but for me I just let them know ok I'm going to choose this one.

Here Bet is using language to enact the politics of a typical Lao family. He describes how it is customary to ask the advice of one's parents, even if they aren't knowledgeable about the topic of enquiry, simply to show respect, and in a sense, keep the family harmonious. Even though he doesn't intend to use their advice, he knows he must ask anyway, as it is part of fulfilling his role within his family and ensuring things continue to run as normal.

These interview excerpts provide two examples of how politics and the distribution of social goods were enacted in interview data. In the first example, the interviewee explicitly uses his language to discuss national politics. In the second example, the much smaller issue of internal Lao family politics are revealed through the choice of words. Both of these examples are significant with regard to the context in which they have arisen, and how they affect information behaviour. In the first example, noticeable effects of the political systems in control include censorship and limited access to information. In the second example, information seeking, use, and evaluation are affected by family politics. Regardless of how insignificant the politics of the situation might seem, they may have far-reaching impacts. The contextual factors related to politics and the distribution of social good, and how they affected information behaviour amongst participants, are described in greater detail in Chapter 6 .

4.2.1.6. **Connections in interview data**

Language provides evidence of how individuals understand the connections between people, places, things, events, and activities Language can also signal how disconnected or unrelated things may be as well. The connection or disconnection of things described in a piece of discourse can be identified by examining the account and asking "How does this piece of language connect or disconnect things; how does it make one thing relevant or irrelevant to another?" (Gee, 2011a, p. 19).

Two interesting examples of interview data providing evidence of how language was used to communicate the speaker's perception of the connection between two things is demonstrated the following two interview excerpt, describing the connection between fortune or luck and later events:

Nicole: I know in Laos it's very popular to go to temple and ask for blessing, or go to fortune teller and ask for advice, did you do anything like that?

Bet: I did it!

N: What did you do?

B: The temple near my house, I just drove my car there, and then the monk blessed my car. It took 2 hours! The monk sat there, *chanting*, just one time, and then that's it.

N: And so that protects the car?

B: Protects the car, for good luck, no car accidents, but you know, after that, I got in 2 accidents!

N: Really?

B: My mom, you know, she got angry at me, "I told you not to buy a black one, buy a silver one!" Forget about it mom! I love the black one!

N: Were the accidents at night-time?

B: No the morning time, I just drove on the road to Septone market, the curve side road, and then the girl, she drive a motorbike, she try to avoid another car, which came out from the small street and then she turned and that's it.

N: So did you have insurance?

B: Yes I had Dodgo insurance

N: So you don't have to pay to repair the car?

B: I'm not wrong, you know, I wasn't wrong it's her fault

N: So she had to pay?

B: She had to pay me, but she said "I don't have money because I still study at high school", and oh my God, "I will tell your father" "No no don't tell my father! I will pay you but not this time, give me 3 months!" and then after 3 months she disappeared, that's the first time, the 2nd time, the girl, the

same condition, you know, "I don't have money, don't tell my father, give me a break about 6 months I pay you back", and then after 6 months she disappeared. Oh you know I get angry at myself, oh you are stupid! 2 times! You forgive them! Come on man! Next time...

In this excerpt the interviewee describes his perception of the connection between the blessing he received at the temple for his car and his misfortune and car accidents. He describes how the blessing did not offer any protection to him from accidents, indicating that the blessing was largely irrelevant to the car's safety or his good or bad fortune. The interviewee uses language to build this area of reality for himself, the reality of traditional belief in Buddhist blessings and how it is disconnected from actual events.

The following excerpt provides a different perspective:

N: Was there anything else that could have helped you?

S: Maybe my fortune I think

N: Ok just luck, Buddha?

S: Yeah just pray to Buddha to help me. Yeah because for the day of the interview they have like a fortune teller come to my house, and I ask to do, like they check my fortune.

N: Your hand?

S: No, not my hand. No they have the flower, the fortune teller only smell the flower, and have two bottles of beer, and like *tok tok tok* like a cold beer you know, a cold bottle of beer.

N: They just tap it or they put the flower in the beer?

S: No just like make to the glass to see the flower through the bottle, and see the flower and smell it, and he said "Ok, you have good luck, you will get this job. Everything up to your interview, because up to you. You help yourself, and when you go to the office you just thinking of me, and you just call his name, and you get the job". And so I got the job.

Here the interviewee uses language to connect his good fortune in getting a good job with the fortune-teller's visit. The speaker quite explicitly makes a connection between these two events – getting a job and the visit from the fortune teller, when asked why he thinks he was successful in

his job search. He connects his luck with the words and foresight of the fortune teller. However, his represents a similar kind of connection as was made in the previous interview excerpt ultimately comes to a different conclusion. Through interpreting these types of connections throughout the interview data a picture of how participants connected and disconnected things emerged. The words participants used to describe their understanding of relevance between or amongst different things and events comprised another building task of language, in which the area of reality concerned with connections is constructed. This area of reality for the participants was identified in the interview data, which, when interpreted, revealed a great deal about how individuals in Laos connected events, ideas, people, places and things, and the role these connections played in the individual's perception of his or her context, which in turn influenced his or her information behaviour.

The interviewees used language to render certain things connected or relevant (or not) to other things, that is, to build connections or relevance. Sometimes these connections were described explicitly; however in other instances the connections were less overt. After examining interview data, and asking how a piece of language was used to build connections, several themes emerged as being commonly considered connected or disconnected amongst participants.

Participants often connected religious or supernatural occurrences to everyday activities. This was demonstrated in a number of different interviews. Some examples include:

- Occurrences being connected to advice from fortune tellers or psychics.
- Occurrences being connected to events in a past life.
- Good or bad luck being connected to the outcomes of a situation.

In addition, participants often connected various information sources with resolving their information need, usually effectively. The Internet, and Google in particular, were connected with successfully finding information on non-local topics. Talking with people, and getting advice, was often connected with resolving local or personal information needs. In this sense, friends, family and other personal contacts were connected with the local context, and the internet with larger issues or non-local concerns.

The interviewees revealed a great deal about the contextual factors affecting their information behaviour throughout their talk. Many of these contextual factors were related to how individuals constructed the connections between people, places, things and events. The connections they enacted through their talk were representative of a number of contextual factors, such as the social and cultural environment. In particular the connections made between the metaphysical and physical world occurred regularly. Other talk connected different sources of information with different purposes. All of these connections occurring in interview talk provided evidence of the contextual factors affecting information behaviour. These contextual factors, and how they related to the connections constructed by the research participants, and their information behaviour, are explored in greater detail in Chapter 6 .

4.2.1.7. Sign Systems and Knowledge in interview data

Language can provide evidence of how the individual favours or disfavors a particular system over another. Asking "How does this piece of language privilege or disprivilege specific sign systems (e.g., Spanish vs. English, technical language vs. everyday language, words vs. images, words vs. equations, etc.) or different ways of knowing and believing or claims to knowledge and belief (e.g., science vs. the Humanities, science vs. "common sense," biology vs. "creation science")? (Gee, 2011a, p. 20) is a starting point from which to examine a piece of language.

In the following interview excerpt, the interviewee described how he prefers information from the Internet over sources he formerly used. In this sense, he is disprivileging older sign systems such as the newspaper, and privileging more advanced sign systems, such as the Internet.

Nicole: Anything else you can tell me about how you look for information or use the information when you find it?

Si: First of all, I go to Internet.

N: Now?

S: Now?

N: Like before you used to use something else?

S: Yeah, before I used to use newspaper, but now, I prefer Internet. For any information, for example, to find a place, a name, anything. For example, history, science, I go to the Internet.

N: If you have any question you go to Internet first?

S: Yeah I have any question I go to Internet, like what's the weather, I go to Yahoo, because Yahoo knows well, I can go to Google ask anything in there. Better than newspaper.

N: You usually read the Internet in English or Lao or Thai?

S: Mostly in English they have like strong information, it's reliable. But I can translate from English to Thai, I can copy from English website to translate in Google, because no Lao language.

N: So you think the English stories are better?

S: I think Thai is easier for me, but actually English has more and is stronger.

The interview excerpt provides examples of not only how information from the Internet is valued over information from other sources, but also how information in English is valued over information in other languages. The interviewee uses words like "strong" and "reliable" to describe English websites, explicitly indicating his preference for English language. He also uses words like "prefer" and "better" to describe his preference for the Internet over newspapers. This interview is just one illustration of how the data yielded evidence of the building tasks of language, in this case to construct the sign-systems area of reality. The following example provides another:

Nicole: So your friend has a lot of experience playing chess?

Sao: Yes they also teach me very intellectual game.

N: So how do you know this person?

S: Uhh wow, I am the kind of person who always wants to experience new things, especially foreign things. When I see a foreigner come here I always come to greet them and share interest. First we just share interest and then I think "Wow, it's the kind of person I am looking for", and try to connect with them, try to make the network with them. After that I don't have only one friend, but I get familiar with other friends, and their family.

N: So they live here in Laos?

S: Yes they live here but now he just went back to Turkey and will come back next month.

N: How old is he?

S: He's about 27.

N: So I just want to ask you, if you can explain to me, when he gives you advice or teaches you a game, do you trust his advice?

S: I trust, obviously I totally trust. Yeah I mean, thing like reasonably again, he tried to teach me, he's honest with me, I trust him, and he always teach me how to do the good thing, and how to be very good and just teach me so I trust him, and even if I'm still confused or there's something I don't know, I ask him, he will give me a clear explanation so I can see a clear picture.

N: So why do you trust him like that?

S: It's quite... not smart but I mean, I can feel it.

N: Just a feeling?

S: Yeah feel it, because, he is totally outstanding, honest, you can see, all his subjects, A, and it's quite strong evident one, and another reason is other students all respect him, even teacher as well. And he can do what he said. And everything he said is more practical. Wow, I think it's quite strong evidence to let me trust him.

In this interview excerpt there are multiple descriptions of how foreign knowledge is valued over local knowledge in certain circumstances. Firstly, the interviewee described his regard for "foreigners", or people from outside the Southeast Asian region. The interviewee talks about how he pursues friendship with people from foreign countries, and how he desires to experience new things. The language he uses to describe both these things reveals that he values non-local knowledge. Later in the interview he describes why and how he has come to trust the advice given to him by his foreign friend. Again, in his account, there is evidence to suggest that he values non-local knowledge and trusts it. Another factor that bears significance in establishing trust is the quality of the content of the information or knowledge that is transferred as well. He views information from a non-local source as being more trustworthy if it is endorsed by peers and respected individuals such as teachers.

Through interpreting this type of privilege or prestige bestowed on certain systems or forms of knowledge over others, a picture of how participants constructed their preferences for particular sign systems or forms of knowledge emerged, permitting a greater understanding of the contextual factors that may have affected information behaviour in Laos.

As described above, knowledge or information of foreign origin was considered more valuable than information from Laos for most subjects. However, this was not the case when the information was related to local issues, religion, or history. In particular, health information, professional information, educational information and technical information was often considered to be of higher quality if it came from a non-Lao source rather than a local source.

One example of preference for non-local resources was evident in the following interview:

Nicole: So, what did you ask your friend? Did you ask Nyai?

Sipjet: I don't really ask, I complain like oh what happened to my face, and then we are talking and they say you try this one you try this one.

N: So, at first, you trust their advice for the cream? Right?

S: Mmmm they suggest me to use many many kinds, but I decided myself I will try that product myself, because I believe like I decide to use L'Oreal, because it's a good brand in European countries.

N: So your friends told you that?

S: No they suggest another.

N: So you didn't listen to their advice?

S: No

N: Why not?

S: I feel like... I want to use this one

N: So, your friend told you, use... Thai or Lao brand, and you went to the shop and got a different brand. Why didn't you trust what your friend told you to buy?

S: Because I feel like L'Oreal is the best brand. I want to try.

In the interviewee's description of why she prefers to use L'Oreal rather than another brand, she cites its popularity in Europe as a factor. The perception of the local product as inferior was common amongst interview data. Numerous interviewees described Thai products as being inferior to Western products, including television, websites and information sources.

On the other hand, participants found Lao news sources trustworthy, but acknowledged that censorship existed and that some of the content was filtered. Participants' perceptions of media, censorship, and the government are explored in greater detail in section 6.3.2.

Local knowledge and information, from family members and friends, was considered more valuable and relevant than non-local knowledge when the topic was perceived to be unique to Laos. When the topic was perceived to be of regional or global significance, Lao knowledge quickly became less valuable. The above examples provide just some evidence of how participants articulated their preferences for certain sign systems and forms of knowledge. These preferences are strongly related to the context in which the discourse occurred, and exerted a significant influence on information behaviour amongst participants. The relationship between the contextual factors influencing preferences for certain sign systems and knowledge over others, and their influence on information behaviour in Laos, are examined in chapter five.

4.2.2. Contradictions in interview data

Talja (1999) describes how contradictions within an interview can provide insight into the macro-social phenomena that affected an individual's behaviour and language. Explicit contradictions within the interview data occurred infrequently, however one particular interview with an 18 year-old female participant revealed that contextual factors such as society and culture could compel an interviewee to be untruthful about their behaviour in an effort to influence how she was perceived during the interview.

Despite explicit contradictions occurring rarely amongst the interview data, it is worthwhile to examine an occurrence using Talja's (1999) method to provide additional insight into information behaviour that complements findings emerging from Gee's (2011a, 2011b) DA tools.

Nicole: So, what do you like to do in your free time?

Saohok: Read books.

N: Really?

My response above demonstrates my surprise, as reading was not a common leisure activity for most of the participants.

N: Ok, I want to ask a few questions. Number one – what do you like to read? Magazines, newspapers, books?

S: Religious books.

N: In Lao?

S: Both Lao and Thai.

N: Where do you get the books from?

S: From the library.

N: Which library?

S: French centre library.

N: They have Lao language books there?

S: They have some.

At this point in the interview I began to get suspicious. The “French Centre Library” she is referring to is part of the French Embassy’s cultural centre in Vientiane, and to my knowledge only contained French language materials.

N: So when was the first time you went to the French centre library?

S: I went to the National Library, I never went to the French centre library, but I went to the National Library.

N: Why?

S: My friends gave advice to me, sometimes I went with my friends.

N: To look for books or something to read?

S: Look for the books with my friends.

N: Can you borrow books to take home from there or do you have to read it there?

S: Just read over there.

N: So you can't bring it home?

S: You can but you have to make like a card.

N: So do you have a card?

S: No

N: So after you went to the National Library when did you first go to the French centre library?

S: No I've never been to the French centre library, just go there for festival and other events.

N: So I thought you said you got the religious book from the French centre library?

S: My sister got it.

N: So you never went there?

S: No never.

Here is where I began to realise that reading wasn't actually a serious leisure activity for the interviewee, despite citing "reading" first amongst her preferred pastimes. However, I did not wish to make the interviewee uncomfortable by confronting her as to why she would misrepresent herself, so I moved onto a related topic, which further revealed her initial lack of straightforwardness. Probing revealed that she had only visited the National Library twice, with friends, and didn't have a library card or know if the library was open on the weekend. We then discussed other leisure activities, such as watching movies and listening to music, areas in which the interviewee was markedly more knowledgeable. This line of questioning revealed that the interviewee had indeed contradicted herself when she reported "reading" as an activity she enjoyed during her spare time.

As recommended by Talja (1999), examining this piece of discourse to investigate the starting point behind the interviewee's account revealed that the social and cultural values of the participant played a strong role in her behaviour during the interview process. These two factors emerged as

central when “the starting point” that would compel someone to misrepresent themselves as more studious or literary than they actually were was considered. Talja (1999) also recommends a researcher consider what other statements in participants’ interview talk are based on the same perspective as a means to identify macro-social phenomena affecting the participant. Closer examination of the interview data revealed that the interviewee had recently completed a preparatory course for university entry at the urging of her family, described in the excerpt below:

N: How did you find out about that course?

S: I have a cousin or relative there.

N: So did you go alone or with somebody else?

S: I went with a friend.

N: To study or just get information?

S: First just to get information.

N: Did you talk to somebody or just get a brochure?

S: I went there because my aunt just gave me advice, just go there.

This excerpt, taken in consideration with the one above where the interviewee’s contradiction was revealed, suggests that the interviewee was strongly influenced by her social context, which emphasised the importance of intellectual pursuits.

While the interviewee’s account did reveal that she was not as avid a reader as she attempted to appear, when probed for more details she did not fabricate additional untruths in order to cover her initial exaggeration. As described above, the interview data provides evidence of Saohok’s motivations for trying to appear more intellectual, however understanding how Saohok perceived her responses and the degree of dishonesty she considered acceptable in the discourse is more difficult to determine. In addition, the validity or reliability of the entire interviewee’s account is called into question due to the evidence of her intention to mislead during the data collection. Saohok’s discourse contains evidence of her perceptions of truth, appropriate conduct, relationships and familial expectations, however interpreting these perceptions through the limited

amount of data contained in her interview is difficult. While certain conclusions can be drawn based on the evidence regarding her contradictions and social context described above, understanding the macro-social factors affecting her understanding of reality require examination of additional data.

Accounts describing the role of the interviewee's social context in encouraging educational advancement occurred in all seven incidents in the "education related information behaviour" cluster. A number of statements in each of these incidents therefore are based on the same perspective as illustrated by Saohok's account. This shared perspective provides evidence of the "unspoken theories about the nature of things" (Talja, 1999, p. 9), that also forms the "starting points behind a particular way of speaking about a topic" (Talja, 1999, p. 9). This method of analysis provided some additional insight into the contextual factors influencing information behaviour, and complements Gee's discourse analysis methods.

Other clusters of information behaviour also revealed similar perspectives or starting points upon which multiple accounts were based. The relationship between the contextual factors affecting these perspectives and information behaviour are explored in section 5.2.

4.2.3. Summary of discourse analysis findings

The above examples have been used to illustrate the seven building tasks of language identified by Gee (2011a, 2011b), and provide some examples of how interviewees used language to build their reality. The interview excerpts above are indicative of how the data was interpreted using the discourse analytic method to reveal contextual factors affecting information behaviour. The areas of reality described by Gee relate to the social construction of reality described in section 3.1.2.

Individual information behaviour varied considerably across different situations and individuals, however despite these variations, many underlying commonalities exist. In particular, the accounts exhibited evidence of having similar starting points, perspectives, and limitations on perspectives, as described by Talja (1999) as indicative of interpretative repertoires and evidence of macro-social factors, described in section 3.3.4.1.

The table included as Appendix B provides an overview of how Gee's discourse analytic method was applied to the interview data, in order to identify the contextual factors in every incident of information behaviour that was collected and how they affected the information behaviour in the incident. Each incident was examined for relevant examples of each of the seven building tasks of language in the interview data. Specific evidence for the conclusions reached in this research is provided for every incident for the building tasks evident in the interview data. Not every incident contained evidence of all seven building tasks. The building tasks present in the incident were then considered, and the overarching contextual factors determined to have most strongly affected the information behaviour reported in the incident was summarised. Not surprisingly, incidents reported by the same individual may have used similar language to build reality. However, as each sense-making situation occurred at a different point in time-space, the language used by an individual to build reality related to one incident may have been very different than the language used in another incident reported by the same individual. Therefore, various contextual factors emerged as having affected an individual differently from one incident to another. These findings are presented in Appendix B, and their implications are discussed in section 8.2.

The primary contextual factors affecting information behaviour that emerged from the data were the social and cultural values of the participants, as well the physical context and access to resources. These contextual factors, and how they affected information behaviour in Laos, are described in section 5.2.

4.2.4. Summary of contextual factors in Laos

The research questions were examined in relation to the evidence collected during fieldwork, and several contextual factors emerged as having a significant influence on information behaviour in Laos.

Contextual factors can refer to:

The totality of circumstances that form the setting for an event, statement, or idea, and through which understanding is constructed. (Adapted from Oxford English Dictionary).

Based on this understanding of context, one can conceptualise all information behaviour as occurring embedded within an individual's context.

These contextual factors are generally most greatly influenced by the cultural and social environments in which an individual became acculturated, as illustrated by evidence provided in section 4.1. I was able to identify a number of contextual factors that influenced the information behaviour described by research participants during the second phase of data analysis. These contextual factors were identified through careful examination of the data which provided examples of interpretative repertoires. I then interpreted these "linguistic building blocks" (Potter & Wetherell, 1987) to draw conclusions regarding the relationship between interviewee's language and the contextual factors that influenced their information behaviour.

As described in section 3.1.2, language plays an important role in social constructionism, one of the theoretical frameworks that influenced the development of this research project.

The analysis of the interview data, as described in section 3.3.2, yielded evidence of certain contextual factors that had a significant impact on the information behaviour of individuals under investigation. The findings indicated that key contextual factors including the political environment, religion, socio-economic status and inter-personal relationships more strongly affected how individuals interacted with information on a daily basis than other contextual factors. These contextual factors found to exert an observable influence on the information behaviour are described in greater detail in Chapters 5 and 6.

Chapter 5 **In-depth exploration of an incident**

The previous chapter reported on the findings of phase one and two of the data analysis. For the purposes of elucidating the development of the findings described in Chapter 6, a particularly rich incident has been selected to provide an in-depth example of data was collected, analysed, and interpreted.

The incident in question describes health related information behaviour of Phet, a 38 year-old female currently living in Vientiane. During the interview I collected relevant demographic information that included a description of her hometown, a small village in the central part of Laos, south of the capital. At the time of the interview Phet was living in a house in Vientiane with her three daughters, aged 18, 17, and 15, as well as her husband and her husband's nephew. At the time of the interview Phet was working as a housekeeper for two European families living in Vientiane and also providing laundry and washing services as electric washing machines are considered luxury items in Laos. Her husband was working in construction and had limited formal education or training. Phet had left school around the age of 13 and therefore also had very little formal education, however she was literate in the Lao language. On the other hand, her three daughters were all enrolled in secondary school, and one was preparing to enter university.

This incident was selected as it includes a particularly rich account of several types of information needs, seeking and use to resolve the same underlying gap in knowledge. This chapter explores the findings of phases one and two of analysis with regard to one specific incident, and introduces the third phase, the findings of which are described in Chapter 6.

5.1. Phet's incident

The data was collected at Phet's home on a Thursday evening. As Phet does not speak English, the Lao-English interpreter was present. After the introductions, I presented the Lao language versions of the information sheet and consent form to Phet. She spent several moments looking over them,

signed them, and then the interview began. We were seated at a table outside her kitchen on a small veranda, and the audio recording device was placed on the table. Initial details such as her name, age, occupation and other demographic information were collected after the research project had been explained and the goal of the interview made clear. I asked questions in English, which were translated into Lao by my interpreter, to which Phet responded. Her responses were translated back into English by the interpreter, and then I made notes about the responses and developed follow-up questions accordingly. This flow of interactions became the pattern for the rest of the interview. The entire data collection procedure lasted approximately two hours from arrival to departure, provided 88 minutes of audio data and resulted in approximately 3600 words of transcribed textual data. The majority of interviews were between 50 and 70 minutes long, although some lasted for as long as 100 minutes. For this reason, Phet's interview can be considered lengthy, but not unusually long.

Initially I asked her to describe some activities she enjoys doing during her spare time. She spoke to me about her hobbies which included weaving, cooking, and watching TV. After a short in-depth examination of her information behaviour related to weaving and watching TV which were analysed as separate incidents, I asked her to describe a situation in which she had to make a decision or solve a problem using information. I provided Phet with a few examples, including buying a motorbike, looking for a job, or handling a health problem. She elected to tell me about an occasion when she dealt with her daughter's health issues.

I asked her to begin by telling me, step-by-step, what happened and what she did in great detail.

She began by telling me about how she first became aware of her daughter's health condition. This occurred when the child was only a few months old, and the child began to show signs of a problem. At that time, Phet was living in a small village in a rural area of Khammouane province, in Central Laos. Phet's first information seeking step was to consult family members for advice on the situation. When no one in her immediate community was able to help resolve her gap, she travelled 36 kilometres to the nearest large town with a health centre, where she visited a doctor. The doctor told her that her daughter had a heart condition.

Nicole: So the doctor said she had a heart condition, then what happened?

Phet: First I didn't know, just only my daughter in the world, just the only one in the world, happened to her, you know what I mean, make sense?

N: So you had never heard of it before, you didn't think anyone else had the same illness?

P: Yeah, I believe that only my daughter has this problem.

N: And then what?

P: I didn't have much money, and second I didn't know what to do, until my daughter was seven years old.

This quote provides an example of Phet's typical information seeking behaviour. Despite her child having a severe health condition which prevented her from going to school or living a full life, she wasn't able to seek useful medical advice due to a number of barriers to information that I will explore in this section. Finally, when her child was seven years old, Phet visited the capital of Laos to attend a wedding with her mother, and her mother suggested she visit a doctor in Vientiane. The doctor in the capital made Phet aware of a project that helped children with similar heart conditions to France for an operation. Then, she brought her daughter to Vientiane, where the doctor examined her and decided she was eligible for the project. Phet and her daughter went back to their village for a few months while the arrangements for the daughter to travel to France were organised. The doctor advised Phet how to make a passport for her daughter, and then her daughter flew to France to have a heart operation. Her daughter stayed in France for several months after the successful operation, and after coming back to Laos, the family decided to relocate to Vientiane so that the daughter could attend a local school with French language education. Phet also briefly described a variety of information behaviour that occurred around the family's decision to move to Vientiane and finding accommodation and a suitable school for her daughter that was not examined as part of the health information incident presently under investigation.

I was curious to understand why Phet chose to wait nearly seven years between her daughter's first diagnosis, to seek additional medical advice, which was unusual from my perspective as a

Westerner. When probed for further detail Phet described information behaviour that, according to her, is quite common in Laos, shown below.

Phet: So I didn't find any way to find out, but I always go to temple and pray hope we have someone help us, like someone to help.

Nicole: Was it that you didn't know anybody to ask, or that you tried to ask but nobody could answer your question?

P: So yes, I tried asking, but it's the countryside, no one knows.

N: So how did you feel at that time?

P: I feel very very sad, but I just think, how can I help my daughter, how can I find a way...

I wanted to try to understand what Phet's perspective was on her daughter's illness, including what the gaps were in her knowledge, and how much information seeking she had done to bridge those gaps. After probing Phet for more details regarding her daughter's condition, and her knowledge of what caused it, she revealed some interesting details including the fact that she had never actually sought information regarding the medical cause of the condition, but rather was content with her own interpretation of the situation, which she described below.

Phet: I thought, that when I was pregnant, maybe because when I was pregnant and I work like construction, and climbed to very high, and maybe because of that, and then my daughter was ill.

Nicole: So you never asked the doctor or anybody?

P: No I never asked, only my idea, it's like Lao people only believe like this.

While this description provided some context for understanding Phet's information behaviour, I was still curious as to Phet's reasoning behind her decisions to not actively seek information. More probing into why Phet never asked the doctor or a medical professional to explain the cause of the illness revealed that her lack of active information seeking behaviour was linked to a number of factors including her religious beliefs.

Phet: I never asked anyone why my daughter is like this, but my mind said, oh, maybe she has sinned in last life, and this time, just born like this. And 2nd thing maybe I was in the high place, and when I looked down make the baby like shocked, maybe because of that.

Again, Phet's description provided some insight into the contextual factors affecting her information behaviour, but I still lacked a deep understanding of the contextual factors that affected her choices in the incident. Further probing revealed that she never asked a doctor for the cause of the illness due to her own belief that those around her could not answer the question and that she herself did not know how to ask.

Phet: I didn't ask because people's idea... it's like very basic, countryside it's always like low education.

Nicole: So I still don't understand why not ask?

P: I have no idea how to ask. I have no idea how to ask...

N: It's not that you don't want to know the truth?

P: I have no idea how to ask, what am I going to ask, what I should ask doctor.

N: So do you want to know, but you don't know how to ask?

P: So I want to know why, but I got no idea how to ask, because at that time, my idea is like, my thinking.

N: Is it because you felt shy? Or overwhelmed at that time?

P: I wasn't shy, but didn't have any idea how to ask. I was just told "It happens like this", but no one answered the question "Why?".

This discourse provides evidence of the difficulties Phet had in articulating her reasoning behind her lack of active information seeking at certain stages of her sense-making, as well as the difficulties I had as an outsider trying to understand her motivations and behaviours. Finally, through this somewhat repetitive questioning process, I was able to gain a deeper understanding of various contextual factors that affected her throughout her sense-making journey.

As mentioned above, overall this incident provided particularly rich qualitative data regarding a deeply emotional, important, unique sense-making situation. Following the successful data collection in Phet's home, various components of the interview data were analysed using Dervin's sense-making metaphor as a framework in order to identify the contextual factors that affected this information behaviour incident.

5.1.1. Sense-making components in Phet's incident

This in-depth exploration provides an example of a particularly rich incident of information behaviour in Laos. It is characterised by a number of factors that may be contextually variable. These factors affected the components of sense-making described by Dervin, such as the situation described by the participant, the gap in knowledge that prompted the information seeking, the sense-making activities and actions used to address the information gap, the bridges used to try to resolve the gap, and the outcomes of the information behaviour.

Analysis of this incident revealed that the components of sense-making were deeply affected by the contextual factors in which the information behaviour occurred.

The situation component of Phet's information behaviour included very little previous experience seeking similar information, limited horizons, a number of constraints and barriers affecting information behaviour, little skill in utilising information resources, and habitual patterns of information behaviour that did not include exercising the widest possible array of sources. This is illustrated by her description of her situation at the time and limited access to information:

Nicole: In your village did you have access to newspapers or book or other resources?

Phet: Nothing. No newspaper, no book, no telephone, no television. Only radio, but actually they have access to radio there in the village, but my family didn't have a radio, only at the neighbour's house.

Unlike some participants Phet didn't have a great deal of difficulty in articulating her gap in knowledge. In addition, the questions and confusions she had regarding her daughter's health

reflect her context. For example, Phet described her first confusion as relating to lack of knowledge of the incidence of the illness her daughter experienced.

The quote above regarding her belief that her daughter was the only person in the world to have this illness illustrates Phet's initial lack of knowledge about health and medicine that would have helped her bridge her gap.

Phet engaged in a number of sense-making activities to try and bridge the gap in knowledge. These activities included going to see a doctor, talking with friends and family, travelling to Vientiane and seeking a medical professional there. These all represent tactics and strategies Phet used to try to make sense of her situation. Similarly to the other components of the sense-making metaphor, the *verbings* Phet engaged in are also indicative of her context. She chose to engage in the sense-making activities she did based on her contextual environment, and more specifically the cultural and social environment in which she is immersed.

Phet's quote above regarding sinning in a previous life provides one example of how religious beliefs affected information behaviour amongst the participants. The concept of reincarnation is central to Buddhism, as are other concepts such as luck and karma which appeared often in the accounts of information behaviour of many of the participants. This quote also illustrates her own beliefs regarding causes for illness which would most likely be considered superstition to many people outside of Laos. The role of these kinds of beliefs, and their impact on information behaviour, is explored in further detail in section 6.2.

The bridges described by Phet are also indicative of her context. These bridges include the ideas and thoughts she has about her situation, her attitudes beliefs and values that influence her choices, and the feelings and emotions that guide her decisions. In the incident under investigation, bridges include how Phet interpreted advice from family, doctors, and friends that helped Phet to make sense of her situation. Phet's understanding and use of the information provided to her through the various sense-making activities and *verbings* in which she engaged was based upon a number of contextual factors, including her feelings, attitudes and beliefs through which she developed her interpretation of the information she received. These bridges include the

affective context of her sense-making behaviour, which in Phet's case was concern, worry, and sadness, as she described throughout the interview.

Phet: I feel very very sad, but I just think, how can I help my daughter, how can I find a way...

Phet's sense-making behaviour in this incident had a number of different outcomes over a period of years. Outcomes can include both "helps" and "hindrances" to the information behaviour, and in Phet's case she encountered both. She described scenarios in which she was given inconclusive or incorrect information, the lack of information that was available to her, and her inability to find relevant and authoritative sources, as the following quote illustrates.

Phet: The doctor give me advice, just take medicine, just keep taking, keep taking and then it will be ok.

Nicole: So he didn't explain to her why your daughter had this problem?

P: The doctor said, just told me, like ok, to accept it, you know what's going to happen, just accept that. And the question I ask myself, why something happen like this, and first thing I didn't have money to go to doctor, just only wait.

The consequences of these contextual factors resulted in a lack of treatment for her daughter for a period of more than seven years, which had a negative impact on her physical health as well as other less tangible effects.

This incident described above provides an example of a particularly rich incident, and of how the interview data were analysed in order to respond to the research questions and provide evidence of the contextual factors affecting information behaviour in Laos. In the case of Phet, the primary contextual factors that emerged were

- A lack of information resources or active information seeking
- Cultural and religious values
- Socio-economic status

These contextual factors played a significant role in the information behaviour the other incidents under investigation and the accounts of other participants. In addition, it was found that the political system also played a significant contextual role in information behaviour. These findings, and their implications, are explored further in the discussion chapter. Further exploration of the findings that came out of analysis of all of the incidents under investigation is described below.

5.1.2. Discourse analysis in Phet's incident

Discourse analysis and the seven building tasks of language were one of the analytic tools used to identify the contextual factors affecting information behaviour (see section 3.3.4.1). Detailed descriptions of the seven building tasks and exemplars of how interviewees used language to construct these seven areas of reality are provided in section 4.2.1.

Gee's discourse analytic method was also applied to Phet's interview, and her incident described in-depth in Chapter 5 . The following findings emerged from a more in-depth analysis of Phet's incident using discourse analysis to examine her information behaviour.

5.1.2.1. Significance

Gee (2011b) suggests examining Phet's account and asking *"How does Phet make the events surrounding her daughter's condition and recovery significant?"* Phet uses her words to make a clear distinction of how significant an event this was in her life. This is demonstrated in the following excerpt:

Phet: So after came back from France, the operation is finished and everything ok, she got a new life. She's perfect, healthy, 100%.

Phet's use of words such as "new life", "perfect", and "100%" provide evidence for how strongly she feels about the success of the operation. Earlier in the interview Phet describes how her family has very little money, and therefore has little expectations for being able to resolve her daughter's illness. Her lack of information resources at hand, her experiences with the doctors in her provincial hospital and in Thailand formed the basis of the situation component of her sense-

making journey. As she had low expectations for bridging her gap, the significance of the successful sense-making journey and outcome for her family were immense.

A cursory investigation of the interview data describing the incident might result in the impression that Phet did not place a huge amount of significance on her daughter's life. The words she uses to describe her daughter, and her daughter's illness aren't full of the sentiment and emotions a western audience might expect. For example, in Phet's description of her daughter's initial diagnosis, she doesn't make any mention of worry or concern that one might expect when a child is ill.

Phet: So she was two months old, something changed, like different, her hands so black, and her mouth like black, and so tired, and always sick, and then I took her to the hospital in the city, in Thakhek.

However, deeper analysis reveals that Phet was actually significantly concerned. Her descriptions of having very little money, yet travelling 36 kilometres, without access to a car or motor vehicle, suggest she considered the situation significant enough to merit action. Later in the interview she described her realisation that if she didn't take action, her daughter would not survive. Her language below reveals just how much she cared for her daughter, and how significant an event it was:

Phet: Because I was thinking, if I just keep my daughter with me, it means my daughter just die. So I just make the big decision, just go to France, that's it.

As described in section 4.2.1.1, few participants described relationships or affection for other people in words that indicated the significance of their feelings. Instead, interview data were examined for other clues as to how significant people, places and things may be to the interviewee. This was accomplished through examination of other factors suggesting how significant a person or event might be to the interviewee, as Phet's account above demonstrates.

5.1.2.2. Practices (Activities)

Gee (2011b) suggests examining Phet's account and asking "*What social practice or activity is Phet enacting in her language?*" Phet used her words to identify practices in which she engaged. This is demonstrated in the following excerpt:

Nicole: So did you try to find any information about a similar programme in Laos?

Phet: So I didn't find any way to find out, but I always go to temple and pray hope we have someone help us like magic, someone to help.

Gee (2011b) describes practices as "a socially recognized and institutionally or culturally supported endeavour that usually involves sequencing or combining actions in certain specified ways" (p. 17). This excerpt provides an example of Phet describing her practice of regularly going to the temple and engaging in prayer. From this description we can begin to understand how, in Phet's context, going to the temple and praying was a practice endorsed by her community, and supported by the local culture and religious institutions. Phet's engagement in this type of socially accepted practice is an example of contextual factors present in her information behaviour situation. Rather than engaging sense-making through other practices, such as "Going to the library" or "Googling it", Phet visited her local Buddhist temple and prayed. Phet's decision to engage in these practices was directly related to her social, cultural, and physical context. Phet embarked upon her sense-making journey from the context of a rural village in Laos with no access to outside information resources. Visiting the temple and praying was one of the few ways in which Phet could try to bridge her gap, given her limited financial and informational resources. Phet's community's reliance on the temple and prayer as the sole accessible method for resolving information gaps is indicative of underlying contextual factors that have far-reaching impact. These contextual factors are described in greater detail in Chapter 6 .

5.1.2.3. Identities

Gee (2011b) suggests examining Phet's account and asking "What identity is Phet trying to take on or enact?". In the following passage, Phet describes her role in the decision-making and organisational processes for her daughter's treatment.

Phet: My husband makes decision with me, and my mum also helps me to decide, but I am the biggest one to make decision to do everything, organise ...

The words Phet chose to use to describe her role in the events suggests that she views herself as the nurturer, caregiver, and decision-maker in this situation. Phet's adoption of these identity traits is indicative of the contextual factors affecting her acceptance of the role and responsibilities that go along with this identity. This passage also provides evidence of how her immediate family supported her adoption of this identity. Other talk in the interview suggests that her community also supported her in her choice to assume the identity of decision maker and caregiver. Therefore, one can infer that the caregiver and decision-maker identity is one that is socially acceptable and culturally supported for people in Phet's situation. Phet's conceptualisation of herself, and the identity she constructed for herself in this situation, affected her information behaviour. How these contextual factors affected information behaviour in Phet's incident and others is investigated in further detail in Chapter 6 .

5.1.2.4. Relationships

Gee (2011b) suggests examining Phet's account and asking "*What relationship is Phet trying to enact in regard to her experiences with the doctor?*" Phet described interactions with a number of different people in her account, and each description included words that signalled how Phet viewed her relationship with the individual with whom she interacted. The following excerpt provides an example of how Phet regarded her relationship with one individual in particular:

Phet: I have no idea how to ask, what am I going to ask, what I should ask doctor.

Nicole: So do you want to know, or you don't care?

P: I want to know.

N: But you don't know how to ask?

P: So I want to know why, but I got no idea how to ask, because at that time, my idea is like, my thinking.

N: What did you say?

P: I said at that time, not any question.

N: Is it because you felt shy? Or overwhelmed at that time?

P: I wasn't shy, but didn't have any idea how to ask. I was just told, "It happens like this", but no one answered the question "Why?"

This passage provides an example of how Phet viewed her relationship with the doctor. She was not able to ask the doctor why or how her daughter contracted her condition, saying, "I didn't know how to ask". This language suggests that Phet viewed herself as being unequal with the doctor, afraid to probe him for further details. Other language used by Phet to describe her interactions with doctors also reiterates Phet's perception of the hierarchy between herself and the doctor. This perception of certain people, in particular those who are well-educated or have a respected role within the community, as being superior to those without access to education, wealth or influence, which in turn affects interactions between people of different social classes. This acceptance and perpetuation of the perception that certain individuals possess more power or prestige than others was examined by Hofstede (Geert Hofstede & Gert Hofstede, 2005; Geert Hofstede, 1980) in his investigation of national cultures. His *power distance* dimension of culture assesses how individuals accept and expect that power is distributed unequally within a society. The social and cultural values that affect how individuals perceive power distribution, and therefore enact relationships between or amongst various levels of power, are contextually variable and affect how individuals communicate.

Phet also described interactions with organisations, institutions, and other groups of people over the course of our discussion. These descriptions also included language Phet used to enact her relationships with these groups and institutions. Similarly, other participants' talk included language used to enact relationships between the interviewee and other individuals, groups, or

institutions. The contextual factors affecting these relationships, and their implications for the resulting sense-making activities are described in Chapter 6 .

5.1.2.5. **Politics (the distribution of social goods)**

Gee (2011b) suggests examining Phet's account and asking "*What sorts of implications for the distribution of social goods does this account enact?*" Phet's interview provided a number of examples of how social goods were distributed, and the norms and values Phet considered relevant to her context. The following excerpt provides an explicit example of the language Phet used to describe how social goods were distributed in her experience:

Phet: When I took my daughter to Thailand the Thai doctor said that your daughter has a heart problem, you have to accept that.

Nicole: No treatment?

P: No treatment, but he told me, if you are Thai, we have some volunteer association to help with operation, and then the doctor asked me "Are you Lao or are you Thai?" And I said "I'm Lao" and then doctor stopped giving advice.

The language Phet uses to emphasise how abruptly and brusquely the doctor responded to her following the disclosure that she was a Lao national, rather than from Thailand, demonstrates not only the effects of literal political boundaries, but also the values and perceptions of the distribution of social goods. In this case, Phet's language provided evidence of the common belief amongst Thai people that Lao nationals are of a subordinate social class. The stereotype is widely held amongst Thai and Lao people. Phet's description of the doctor asking her if she was Lao or Thai indicates that the doctor had no clues to indicate her nationality. Most likely, the doctor and Phet were of the same ethnic group, called Lao Loum in Laos, and Issan in Thailand. These groups share the same language, same culture, and same biological ancestry. However, they do not share national identity. Phet's language demonstrates that residence on one side of a political boundary affects an individual's access to health care and assistance in the context of her sense-making activities. The perception that Thailand, and consequently Thai people, is a more developed, informed, advanced country than it's neighbour to the North is a widely-held belief. Thai people

often label Lao people as uneducated, rural, and poor. These social stereotypes and beliefs are direct results of the social, cultural, and physical context of the region, and have substantial implications for information behaviour. See Chapter 6 for further examination of the contextual factors affecting the distribution for social goods, and its implications for information behaviour.

5.1.2.6. Connections

Gee (2011b) suggests examining Phet's account and asking "How is Phet connecting things or making them relevant to each other? How is she disconnecting them or making them not relevant to each other?" Phet's language provides a number of indicators signalling how people and things are connected to one another. The following example demonstrates how Phet connects spiritual and physical events:

Nicole: So up to now, do you know why your daughter was born with this illness?

Phet: I thought, that when I was pregnant, maybe because when I was pregnant and so go up, I work like construction, and climbed to very high, and maybe because of that, then my daughter was ill.

N: Just your idea?

P: Yes

N: So you never asked the doctor or anybody?

P: No I never asked, only my idea, it's like Lao people only believe like this.

N: Why didn't you ever ask the doctor to explain to her the cause of the illness?

P: I never asked anyone why my daughter is like this, but my mind said, oh, maybe she has sinned in last life, and this time, just born like this. And 2nd thing maybe I was in the high place, and when I looked down make the baby like shocked, maybe because of that.

In this passage Phet signals that she believes her daughter's physical condition to be connected with two metaphysical occurrences. Firstly, she describes how she connected her daughter's condition to her work experiences while she was pregnant, in which she climbed to a high place, and looked down, and her shock or fear of heights affected the unborn child she carried. Secondly, she describes how she assumed her daughter was born with this condition because the soul

inhabiting her child's body had sinned in a past life. These conceptions about the cause of her daughter's health condition which were connected in Phet's mind influenced how she engaged in information behaviour. Phet's perception of how these occurrences were connected was derived from her context, particularly her social and cultural environment which supported beliefs connecting metaphysical and physical concerns. These contextual factors, and how they affected information behaviour in Phet's case, and other interview data, are examined in Chapter 6 .

5.1.2.7. Sign Systems and Knowledge

Gee (2011b) suggests examining Phet's account and asking "How is Phet privileging or disprivileging specific sign systems (languages, styles of language, non-verbal sign systems) or specific ways of or claims to know and believe?" Over the course of the interview Phet described valuing certain forms of knowledge more than others. Medical information was seen as valuable, and privileged. In the following passage, Phet used her word choices to signal how she felt about the knowledge available from people in her community.

Nicole: But why did you never ask for advice?

Phet: I didn't ask because people's idea... it's like very basic, countryside, it's always like low education.

Phet's language here signals that she had little esteem for rural knowledge when it came to health related issues. She considered members of her community to be "basic", and have little education. She did not privilege the knowledge or ways of knowing possessed by members of her community or the information available to her there. On the other hand, Phet's language signalled that knowledge and the technical language used by doctors and health care professionals was privileged and valuable to her. Phet's conception of rural knowledge developed over the course of her experiences and was informed by her context. Living in an environment with little access to outside resources, and as Phet describes it, "low education", and needing access to different types of knowledge to resolve her information gap prompted her to engage in seeking external knowledge systems. As described above, Phet's decision to seek knowledge outside her community eventually gave her the opportunity to leave her community and move to an urban area. It was there in the

urban area she gained perspicacity regarding her situation and the knowledge systems existing there. If not for her experiences with her daughter and the medical profession, she might never have left her village, and never gained the insight required to reflect upon the lack of relevance of the knowledge of her community. This insight and understanding was the result of a confluence of contextual and situational factors, all a part of her sense-making journey. These contextual factors, and how they affected information behaviour for Phet and the other participants, is explored in greater detail in Chapter 6 .

5.2. Summary of Phet's incident

My interview with Phet yielded a rich description of information behaviour in Laos. Phet engaged a number of different sense-making activities in order to resolve an initial gap in knowledge regarding her daughter's health issue. A deeper understanding of the contextual factors surrounding how Phet engaged with information, and why, emerged following careful consideration and analysis of the data, and the language Phet used to describe her activities. Phet's incident played an important role in developing a better understanding of information behaviour in Laos. Similar findings emerged from other interview data, which are explored in the following chapter.

Chapter 6 **How contextual factors influence information behaviour**

The exploration of Phet's information behaviour incident in the previous chapter provides an example of how the phases of analysis were used concomitantly to develop an understanding of how contextual factors affected her information behaviour. In this section I explore the contextual factors identified across all the interview data, and discuss how these factors affected the way everyday information behaviour occurred in Laos.

The identification of the relationships between information behaviour and contextual factors was accomplished through a synthesis of use of analytic tools including discourse analysis and Dervin's SMM. I used discourse analysis to analyse every incident of information behaviour described by participants for evidence of the contextual factors influencing the sense-making activities described by participants. This section explores the findings of that analysis, and how the information behaviours identified in phase one of analysis were influenced by the contextual factors emerging from phase two of analysis is provided.

Analysis of the data revealed that the influence of the various contextual factors that affected information behaviour in Laos could be divided into two categories, primary and secondary factors. Those factors exerting a stronger influence on information behaviour are categorised as "primary", and those that influence it to a lesser degree are categorised as "secondary". These overarching contextual factors are listed in Table 17 below.

Table 17 – Contextual factors influencing information behaviour in Laos

Primary contextual factors	Secondary contextual factors
Society Culture (Religion)	Physical factors Political system Socio-economic status Personal factors Situational factors

6.1. Primary contextual factors and their influence on information behaviour: Social and cultural context

Through in-depth analysis of the data, a number of primary and secondary contextual factors emerged as playing a significant role on information behaviour in Laos. The overarching significant factors that influenced how individuals engaged in information behaviour were often related to social and cultural values. As summarised in section 2.2.2, scholars such as Geert Hofstede (1980) suggest that social and cultural values are the predominant contextual factors that affect human behaviour.

The influence of cultural and social factors on information behaviour was found throughout interview data. Table 18 provides some explicit examples of this influence.

Table 18 - Explicit examples of cultural values influencing IB

Sipet: In Lao culture, wives always control the money.
Sipsam: But the Lao culture, it's strange, but I don't feel, because you spend maybe 20 minutes, one hour a day in the toilet, and to me, myself, when you are at the toilet, I think the concentration is very good. I get ideas quickly when I read in there.
Nicole: So, if someone is older than you, you have to respect them and be polite to them? Siphok: Yes I think because of culture. One more thing. Not only older people, but older people with high position. We... not only me, all Lao people have respect.
Sipgao: Because I believe that we have, because in our culture, every car when you buy, you have to go to the temple first, but not 100%, depend on belief. But almost

everybody go to the temple. For good luck.

The above excerpts provide examples of interviewees specifically describing how culture influenced people's behaviour and attitudes. Interviewees also made general statements regarding "Lao people", indicating the attitudes and behaviours common in Lao society, shown in Table 19 below.

Table 19 - Embedded descriptions of cultural values influencing IB

Saobet: Lao people if they have a competition it's like jealousy.
Sipha: Because I think it's the personality because Korean people and Lao people sometimes doesn't fit together.
Siphok: I think that one thing, in my opinion, if we show a lot of news around every news that is around, people know maybe for example, the news about crime, if Lao people know, a lot, Lao people feel not safe or something. They will be afraid to go everywhere or something like this. I think it's good and bad go to together. One thing I told you as before they block people's news."
Sipsi: Lao people now we don't really trust to buy things on internet.

The cultural and social dimensions of context are very closely related. In the above examples, the interviewees specifically described how Lao society and Lao culture affected their behaviour, or influenced their activities. In every incident collected, the social and cultural values of the participant had either an explicit or implicit influence on how the interviewee interacted with information. Other examples include Gao's description of her decision to begin engaging in consumer related information behaviour.

Nicole: So, at that time, when you first started talking to people asking for advice about how to select a car how to buy it, what was your number one question?

Gao: They ask me, "Why not buy it?", you know, "Buy it, it's convenient for you", something like this, "If you have money why do you ride a motorbike? You have to buy a car.", so that's the questions people asked me, and impress me to buy it.

While this example does not specifically use the word "culture" or refer to "Lao people" as a society, its reference to the social and cultural dimensions of context affecting her activities are implicit. Within Gao's social environment, people with sufficient financial resources are expected

to own a car, rather than ride a motorbike. Car ownership is an important status symbol in Gao's social context, and this has affected her information needs.

A young, single, male interviewee also described how social and cultural values affected his information behaviour in a different way, when he spoke about purchasing a car.

Nicole: Did you ask any of your friends or family for advice? Did anyone give you any suggestions?

Bet: For advice I asked my friends who use Hyundai too, and then I asked my father and mother you know because they don't have any knowledge about cars, just to give them an overall idea about which one they think is more interesting.

N: So you did ask them?

B: Yep

N: Even though they don't have experience?

B: I ask my parents because I want to show respect to them, but I don't use their advice.

Bet felt obligated to ask his parents for advice regarding his purchase because of the social and cultural values affecting his behaviour. There were numerous examples of how social and culturally defined "norms" affected people's behaviour, some more explicitly, some less.

In the following interview excerpt, the interviewee described his use of the newspaper for consumer related information seeking.

Nicole: And how do you know you can depend on Vientiane Mai newspaper?

Hok: Just my belief, I do not really read other newspapers. I think it's quite popular, so I think it's ok for me.

Acceptance by wider Lao society, indicated by Hok's description of the newspaper as "popular", is another example of how the social and cultural context affected information behaviour amongst participants. In many cases, the participant appeared to have been unaware of how these social and cultural contextual factors affected the behaviour. It was only through the in-depth analysis of

the interview data that my understanding of how these contextual factors affected information behaviour emerged.

The social and cultural contexts experienced by participants affected information behaviour in numerous ways. As shown in the above examples, every step of the sense-making journey was influenced by social and cultural contextual factors.

6.1.1. Situation

The social and cultural contexts of the participants have clear implications for the sense-making situation in which information behaviour was initiated. Dervin (2008) described the *situation* component of sense-making as history, experiences, horizons, constraints, barriers, habits and skills.

Dervin (Dervin, Foreman-Wernet, & Lauterbach, 2003; Dervin, Harpring, & Foreman-Wernet, 1999; Dervin & Huesca, 1997; Dervin, 1976, 1983, 1992, 1997, 1998, 1999, 2003; Naumer, Fisher, & Dervin, 2008; Rutledge Shields & Dervin, 1993) does not specifically describe how culture or social environment may influence an individual's sense-making situation, however certain conclusions regarding this relationship are apparent when considering how Dervin describes the *situation* component, and the main features of social and cultural contextual factors.

These features include the values, customs, heritage, habits, and beliefs shared by a group of people (Oxford University Press, 2010). The shared heritage, customs, and beliefs have an impact upon the history, experiences and horizons of a member of that social group. As discussed in section 2.5 the national culture of Laos is not uniform; however there are many common features present in interview data related to the social and cultural values shared amongst interviewees. While the participants reported incidents from similar social and cultural contexts, the individual situation component of their sense-making behaviour varied considerably from incident to incident, even within incidents reported by the same individual. This variation was due to the unique nature of every sense-making incident, and how individuals perceived the relevance of different experiences, horizons, barriers, habits and skills to the sense-making situation they described. The

above examples provide evidence of the more explicit overall impact of social and cultural context on sense-making incidents. In the following excerpt, the interviewee provides an example of how the social and cultural context affected the situation component of sense-making behaviour, describing newspaper-reading habits in Laos:

Sipsam: No no, it's very difficult, even now [to access the newspaper]. I don't feel many [people], but some, but not all, have subscription for the newspaper, only offices.

Nicole: Why, because it's expensive, or they just don't like to use it?

S: I don't think expense is the main cause, I think the habit is the main cause.

N: People just don't have the habit of reading the newspaper?

S: Yes but when you are in a reading habit environment like overseas you have to adapt, and I feel like normal, but here you feel strange if you sit in a public place and read something.

N: Really? But in other countries everybody does that!

S: Yeah, But not in Laos.

N: In New Zealand just bring your book or newspaper to the restaurant or outside and read.

B: I did that when I went to France. On the bus, whenever you have free time, but here, no. Even in toilet. But now, I do in the toilet!

Anecdotal evidence also supports the above interviewee's observation that reading for pleasure is not a prevalent custom in Laos. During the time I lived in Laos, my habit of reading on the bus often elicited comments from fellow passengers such as "What are you studying?" Dervin describes the sense-making *situation* as comprising habits, amongst other values. The lack of reading habit is a shared social and cultural value that influences the situation component of sense-making behaviour in Laos.

In addition to the example above, numerous less explicit accounts of social and cultural values affecting the sense-making situation were present within the data, and only emerged through the application of discourse analytic tools, as described above. The table provided in Appendix B summarises the salient points to emerge from this analysis.

6.1.2. Gap

The gaps in knowledge reported by the research participants arose in unique social and cultural contexts, and influenced the sense-making activities related to those gaps in knowledge. Dervin (2008) described the “gap” component of sense-making as “questions, confusions, muddles, riddles, angst” (p. 17). As with the *Situation* component of sense-making, Dervin’s (Dervin et al., 2003, 1999; Dervin & Huesca, 1997; Dervin, 1976, 1983, 1992, 1997, 1998, 1999, 2003; Naumer et al., 2008; Rutledge Shields & Dervin, 1993) publications do not provide an explicit description of how culture or social environment may influence an individual’s gap, however certain conclusions regarding this relationship are apparent when considering how Dervin describes the *gap* component, and the main features of social and cultural contextual factors.

Gaps in knowledge varied considerably from participant to participant, and also varied significantly within incidents reported by the same individual, despite similar social and cultural contexts. This variation was due to the unique nature of every sense-making incident, and the existing knowledge base of the individual at the time of the sense-making activity. According to Dervin (1976, 1983, 1992, 1997, 1998, 1999a, 2003), every sense-making incident begins from a different point in time-space, the gap in knowledge an individual experiences, and how he or she perceives that gap, and articulates related questions, will be unique.

The examples provided in Chapter 6 provide evidence of the more explicit overall impact of social and cultural context on sense-making incidents. In the following excerpt, the interviewee provides an example of how the social and cultural context affected the gap in knowledge of her sense-making behaviour during an interview that took place at the only large fitness centre in Vientiane.

Nicole: So at that time, did you feel like... what was your question? How can I be slim? Or how can I exercise?

Sipgao: At that time, I want to lose weight.

Siggao goes on to describe how she sought information related to weight loss by asking the staff of the gym facility and a personal trainer for advice. Further probing revealed she also sought information from her peers, but with less success, as shown below.

N: So did you discuss with your friends about fitness and exercise, give each other advice?

S: Yeah, but they didn't follow my advice, because look at me they said.

N: You look slim to me!

S: No, they said, "You look like a pig."

N: They said that?! Your friend said that to you?

S: Yeah, so they don't believe me. However I keep going, I don't care about them, whatever they said. Because before I look slim. Very slim very thin, and when I come here to exercise, I look bigger, I don't know why. Women always diet non-stop. Even my mother, always careful when we are eating.

In the above example, the interviewee perceived a gap in knowledge related to weight loss that was clearly influenced by her social and cultural context. Her social environment, comprised of her family and friends, contributed to the body of knowledge in which she began her sense-making journey, and her perception of the gap in her existing knowledge. Siggao's confusions and angst related to her body image was the result of shared social and cultural values that specifically affected the gap component of sense-making behaviour. The interviewee's gap in knowledge was also influenced by secondary contextual factors, such as the availability of information resources, which are discussed in greater detail in section 6.3.1.

In addition to the example above, numerous less explicit accounts of social and cultural values affecting the "gap" component of the sense-making metaphor were present within the data, and only emerged through the application of discourse analytic tools, as described above. The table provided in Appendix B summarises the salient points to emerge from this analysis.

6.1.3. Sense-making

The sense-making component of Dervin's sense-making metaphor is described as the "verbings, procedures, strategies, and tactics" present during the sense-making journey. The social and cultural contexts of the participants have clear implications for the sense-making component of an individual's information behaviour. As with other components of the sense-making metaphor, how culture or social environment may influence an individual's *verbings* is not made explicit in Dervin's writings, however certain conclusions regarding this relationship are apparent when considering how Dervin describes the "sense-making" component, and the main features of social and cultural contextual factors (Dervin et al., 2003, 1999; Dervin & Huesca, 1997; Dervin, 1976, 1983, 1992, 1997, 1998, 1999, 2003; Naumer et al., 2008; Rutledge Shields & Dervin, 1993).

Interview data revealed a number of shared social and cultural values that influenced the sense-making component of their information behaviour. However these shared values affected individual sense-making differently, which varied considerably from incident to incident, and amongst incidents reported by the same individual. As with other components of the sense-making metaphor, this variation was due to the unique nature of every sense-making incident, and how individuals perceived and articulated their strategies and procedures towards resolving the gap in their knowledge.

In the following excerpt, the interviewee provides an example of how the social and cultural context influenced the sense-making component of her sense-making behaviour related to enrolling in a training course for hair stylists.

Nicole: So when you first had that question, "Can I do it?", how were you feeling?

Saojet: I was worried

N: Did you ask advice from your parents if you should go study?

S: I asked everyone, I asked my father, I don't have mother.

N: And did they support you?

S: Yes, they mostly agree with me, except like my brother who I used to live with, doesn't agree much, because he knows how to get money, how to earn money. But I just thought, "Ok, I love it, I want to do it."

N: So did you ask your friends for advice?

S: Yes I asked advice from my friends, friends who work for a shop like this.

N: So how did you find out about the course?

S: My friend who used to take this course told me.

N: So, after you friend told me about it, what did you do?

S: When I found out about this course from my friend, I went back to ask my brothers, and one brother told me, "Make sure if you start, you finish this course, and you have enough money to open a shop." The other brother told me, "Ok, just go and do it.", just support me.

N: Ok, so then what was the next step?

S: I went to look with my friends

N: So when you went to look did you talk to anybody or get a brochure or any information?

S: During that time, I went to look, and I just asked the manager about it and took the application form.

In this example, Saojet's sense-making including discussing her wishes with her family and friends, consulting her family, asking for advice, sensing and expressing her feelings, visiting the training centre, asking the manager about the course, taking and application form, amongst other strategies and tactics. These sense-making activities were influenced by the cultural and social contexts in which Saojet engaged in information behaviour. In other cultural or social contexts, an individual may not engage in the same strategies to make sense of his or her situation. The interviewee's decision to consult her family, and physically visit the training centre was a result of the social and cultural values shared by the interviewee and the majority of Lao society. The predisposition to involve family members in decision making is a value more strongly associated with collectivist cultures, an area explored by Geert Hofstede and Gert Hofstede (2005), and described in greater detail in section 7.2.1.

In addition, the social and cultural contexts of the participants affected the ways in which they went about making sense of their situation, particularly in the instances where individuals avoided engaging in active information seeking. For example, a new business owner was struggling with attracting customers and making her business successful. The business was located on a main road next to a Lao handicrafts shop that was a destination of organised tours from Thailand. The business owner had opened a restaurant in her family's home with the intention tapping into the existing customer base.

Nung: Did you ever talk to the shop next door and ask them for advice?

Nicole: I never asked. If I ask they will just say 'shut down' or 'close down the business'. They never give good advice.

Nicole: Really? Why?

Nung: Yes, because those people are like rich and have a lot of money and don't want the competition.

Nicole: The neighbours?

Nung: Yes. I can say Lao people if they have a competition it's like jealousy.

This is an example of self-protective behaviour that has hindered information seeking behaviour. Rather than potentially be viewed as "somehow less capable than their neighbours in coping with life-stresses" (Chatman, 2000) in quite a literal sense, the business owner has chosen to struggle with the limited amount of information she has at hand. Further probing indicated she had done very little information seeking, despite not having a great deal of experience.

Nung: We decided to open the restaurant and also my husband likes the restaurant business and talking to people.

Nicole: So, when you decided to open the restaurant, who did you talk to? Who did you get information from about how to change their business?

Nung: We didn't talk to anybody, my husband already had the plan to the open the restaurant. This place is our own place already.

Nicole: Oh you owned the property?

Nung: Yes just decide how the restaurant is going to run, what we are going to sell.

Nicole: Didn't ask for advice from anybody?

Nung: No just five months everything complete and then open the restaurant.

Nicole: So, when you didn't have any customers, did you ask anybody for help?

Nung: We didn't ask for help, but our friends offered us the idea to change the music.

Nicole: Like live music?

Nung: Yeah folksongs

Nicole: Did you listen to their advice?

Nung: We didn't follow the advice because this location is a kind of centre so we can't have folksongs and this place is just in front of the main road and next door they live so close we cannot do anything like that idea.

Again, the interviewee describes what appears to be intentional information avoidance. Similar evidence of information avoidance was also described by other participants. In the example below, a retired woman wanted to open a shop in her family home.

Saobet: I asked my husband what to do, he gave me advice. Actually we ask advice from each other, but when I ask something, he just says 'yes', and agrees with everything.

Nicole: So you didn't ask your family or neighbours or anything?

S: No

N: What about *naibahn* (village chief)?

S: No, when I just opened the shop, he taxed me. He just came here and gave me the invoice. But one of my neighbours just said 'Why should you do this? You are already old. You should just stay home and take care of your daughter', she didn't support me, just like jealousy.

This example shows evidence of the lack of information seeking that occurred. In other parts of the interview, the interviewee describes how she set-up her shop, purchasing the required materials. As above, the interviewee appears to intentionally avoid information seeking, even if it hinders a more efficient or effective outcome.

Nicole: So did you ask anybody for advice on how to open the shop?

Saobet: I didn't ask anybody.

N: So how did you know where to buy the products, everything?

S: I didn't ask anyone, but the customers advise, not really advice, but when they come to the shop they ask, do you have soap, do you have this... which one I should buy.

N: But how did you know where to buy the case the glass case to put the products?

S: I didn't ask anyone, ok, just think about this, which one I should get to put in, and first thing is like a fridge, second thing... step by step, that box, and even if I don't have something more to buy.

N: How do you know where to go to buy the box or the fridge?

S: Just go for a drive, just look for fridge, and when we see it, I talked to my husband, ok, we need a fridge, just go for a drive, and see the shop, and ask them, ok I need it, and they just bring it out.

In this exchange, the interviewee reveals a lack of active information seeking. Instead, information needs are resolved through serendipity. Despite the interviewee's position, starting a new business, and having no previous knowledge or experience running a shop, she did not actively seek out information before she made the decision to open the shop, or after the initial launch of the business. It would appear that other than soliciting advice from friends, who told her she was "too old" to start a new business, and should just "stay at home and look after your family", she pursued her entrepreneurial interest without being fully aware of the implications of her decision.

Similar situations were reported in other interviews, such as the one described below.

Nicole: So how did you know about that shop?

Samsip: Just go check first

N: Did someone tell you about it?

S: No, just go drive.

N: Was it on TV?

S: No, just go direct to that shop.

N: But how did you know about it?

S: I was just driving and saw it.

N: Ok, so you were over there for another reason, and you saw it.

S: I went and checked, and I found it.

N: What do you mean go and check?

S: For example, if you want to buy motorbike, like I want to buy computer, I go to the shop first, just go to look.

N: Yes, ok, I understand, but how did you know to go to that shop? Did you see an advertisement or did someone tell you to check there?

S: It's very hard to tell you, ok, I want to buy something, just go around in Vientiane, and see the signs.

N: So you just drove around?

S: Yes

N: You didn't ask anybody where to go?

S: No, because it's Thai motorbike, they don't have advertising

N: Why not?

S: Just don't do it.

N: Ok, why did you go in that shop, was it the sign outside? Why did you decide to go and check in that shop?

S: I saw the motorbikes outside.

Here, a lack of mutual understanding is evidenced in the interview transcript. What is apparently a commonplace activity (driving around until you find what you are looking for) was not an activity I was familiar with, and it took a lengthy line of questioning until the interviewee was able to grasp the fact that I did not understand how she had found the shop, or that I was unfamiliar with this practice. While this interview provides an example of an information behaviour incident, it does not provide much explanation as to why individuals might engage in less efficient and effective

methods of seeking information. Section 7.3.2 explores the findings and existing literature in an effort to understand why some individuals avoided engaging in active information behaviour.

In addition to the example above, numerous less explicit accounts of social and cultural values influencing the “sense-making” component of the sense-making metaphor were present within the data, and only emerged through the application of discourse analytic tools, as described above. The table provided in Appendix B summarises the salient points to emerge from this analysis.

6.1.4. Bridge

The participants’ social and cultural contexts had both observable and embedded influences on the *bridge* component of his or her information behaviour. Dervin (2008) describes the bridge component of the sense-making metaphor as the “ideas, cognitions, thoughts, attitudes, beliefs, values, feelings, emotions, intuitions, memories, stories, and narratives” (p. 17) an individual uses to make sense of his or her reality when he or she encounters a gap. As with other components of the sense-making metaphor, evidence of the relationship between culture or social environment and an individual’s bridge is not specifically described by Dervin, however certain conclusions regarding this relationship emerged when Dervin’s description of the bridge component was examined concomitantly with the main features of social and cultural contextual factors (Dervin et al., 2003, 1999; Dervin & Huesca, 1997; Dervin, 1976, 1983, 1992, 1997, 1998, 1999, 2003; Naumer et al., 2008; Rutledge Shields & Dervin, 1993).

These main features of social and cultural contexts, as defined above, exert considerable influence upon the ideas, thoughts, and feelings an individual may use to try to bridge a gap in his/her knowledge. Shared social and cultural values amongst the interviewees accounted for certain similarities in the bridges participants described using during their sense-making journey. However these shared values affected individual bridges differently during sense-making, which varied considerably from incident to incident, and amongst incidents reported by the same individual.

Sip’s incident, explored in section 4.1.2, provides an excellent example of how the social and cultural context affected the bridge component of her sense-making behaviour.

Nicole: So at that time when you decided to leave, who did you talk to?

Sip: Just only my sister, but before my friends who work at the same place told me I should leave.

N: So at that time what was your question? Should I leave my job?

S: I didn't ask anyone any question, just leave. I used to work with foreigners, so I understand the system and know the way to work with them, so after the Chinese took control, I wanted to leave.

N: So when you left there what was your question?

S: My question was, should I stay or should I go? Because I don't like the Chinese system.

N: So what did your sister tell you?

S: It depends on you, my sister said.

N: What did your friends tell you?

S: My friends didn't give me any advice because they already left before me. My friends already work the same position so I already knew what's going to happen, like if we stay nothing is better, so nothing will improve, my friend didn't say anything, I already knew I was going to leave.

N: But how, how did you know?

S: I asked myself the question why should I stay, because work is not good anymore, and new people coming, old people leave. My feeling is that it won't be good anymore, so I just left and came to work in this shop.

In the above excerpt, Sip describes how she bridged her confusion through sense-making behaviour that was greatly influenced by the social and cultural context in which her gap in knowledge arose. Rather than bridge her gap using ideas taken from information resources such as books or the Internet, Sip's bridge was not based on a resource or communication. As described in section 3.3.3.5, this is still a valid sense-making behaviour, and reveals a great deal about the social and cultural context in which the sense-making incident occurred.

Several interviewees reported religious figures, such as monks or nuns, as being sources of information to them. In the following excerpt, the interviewee describes how the ideas transmitted to her by monks and nuns at a Lao temple in the United States helped her deal with a health issue.

Nicole: So who else did you ask about more information? Other friends?

Sipsam: Usually I ask the monk.

N: In Utah? They have monks?

S: Yes in Utah, they have Lao monks, and Thai monks. And then I asked the nun. Because the nun is a woman, it's easier to talk.

The interviewee's choice to use the ideas communicated to her by monks and nuns was influenced by her social and cultural values as a Lao person. Despite being in the United States at the time of her sense-making incident, she bridged the gap in her knowledge using traditional Lao sources of information. The use of similar resource people to help the participants bridge gaps in their knowledge was reported by other interviewees. Many interviewees also exhibited a strong preference towards interpersonal information sources as bridges, which is likely related to the social and cultural contexts of the participants. In addition of the examples above, numerous less explicit accounts of social and cultural values affecting the "bridge" component of the sense-making metaphor were present within the data, and only emerged through the application of discourse analytic tools, as described above. The table provided in Appendix B summarises the salient points to emerge from this analysis.

6.1.5. Outcomes

Social and cultural values exert influence over the outcomes of sense-making, and how individuals perceive the resolution, or lack thereof, of the gaps in their reality. The *outcomes* component of Dervin's sense-making metaphor includes the "helps, facilitates, hurts, hindrances, consequences, impacts, and effects" present over the course an individual's sense-making journey (Dervin, 2008, p. 17).

As with other components of the sense-making metaphor, the exact relationship between social and cultural contexts and the outcomes component of the sense-making metaphor is not made explicit in the literature (Dervin et al., 2003, 1999; Dervin & Huesca, 1997; Dervin, 1976, 1983, 1992, 1997, 1998, 1999, 2003; Naumer et al., 2008; Rutledge Shields & Dervin, 1993). However, certain conclusions regarding this relationship can be drawn from reflecting upon Dervin's

description of the *outcomes* component of the sense-making metaphor, and the main features of social and cultural contextual factors, defined in section 4.2.1, which exert considerable influence upon the helps, hindrances, consequences, and effects an individual may experience during his or her sense-making journey.

The *outcomes* component of the information behaviour reported by the participants contained evidence of shared social and cultural values, however these shared social and cultural backgrounds affected individual sense-making differently. Interview data, such as the examples provided in section 4.2.1, revealed the extent of the impact of social and cultural context on information behaviour in Laos. In the following excerpt, the interviewee provides an example of how the social and cultural context affected the *outcomes* component of her sense-making behaviour.

Nicole: So, when you finally got information from the shop owner, and then you decided to purchase the car, how did you feel then?

Gao: I felt like I mentioned, they gave me time, to select which one, because there are many cars in the shop, which one, which colour, which kind of car do you like, so one week, they gave me to select it, and one week to try, and after that, I told them, "this one, we will take". But you know, at that time, I am an optimist, because the colour, before I decided to have yellow, not too yellow, like brown yellow, something like this, but that one is blue, but I decided to take it, even though my relative said "Why you take this colour? When something sticks to it, it's dirty, so you can buy brown one, or white one, or yellow one, something". So I wasn't sure, it went out of my mind, I thought but, finally I decided this one.

N: So for example when your relative told you "Get the brown one, get the yellow one" why didn't you listen to his advice?

G: You know why I didn't listen to him was because at that time, it's New Year, when I took it, I went to Noi's house, and we did a celebration and *baci* ceremony, at that time I won the lottery, so it give me a big chance, so I decided to take it forever.

N: How much did you win in the lottery?

G: Two million (Kip, about \$300 NZD)

N: Congratulations!

G: Thank you.

N: Did you find when you were looking for your car anybody gave you some information or advice that was not good?

G: Yes, but they didn't say something like that, they say "Why don't you buy Toyota?", something like this, but my relative's car shop advise me if I buy Toyota, it's you know, you spend a lot of money for gasoline because it's a big engine, so this one is ok, for you.

N: So when you were looking for information, do you prefer to ask your relatives and friends or you prefer to ask other people?

G: Ask my relative, because he or she has a car shop.

N: And you trust them more because it's your relative?

S: Yes, you know, as I mention, I believe what they say is true, because, I am truthful person, so I think they are truthful person too.

N: Was there any questions you had but you couldn't find the answer?

G: When I was looking for information?

N: Yes

G: Maybe, but I didn't realise at that time.

The interviewee's description of the outcomes of her information behaviour above includes numerous examples of the social and cultural values that affected the consequences of her sense-making behaviour. She expresses satisfaction with the outcomes of her sense-making journey, and suggests that she has successfully bridged her gap in knowledge. She also expresses confidence in the information she received over the course of her sense-making behaviour. This satisfaction and confidence in the outcomes of her incident are directly related to the social and cultural contexts that influenced her sense-making journey from the first step to the last. The reasoning she provides for feeling confident in the information she received has clear links to the social and cultural values associated with Laos' national religion, Buddhism, such as karma. Gao's description of how winning the lottery was also a sign that her sense-making incident had been resolved successfully. This connection between winning the lottery and perceiving her sense-making outcomes to have been successful was also supported by her social environment. As she describes

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above, she visited a friend's home, who also confirmed that the lottery win was fortuitous, and indicative that she had made the right decision. Her understanding of the "outcomes" component of her sense-making behaviour was socially and culturally supported in the context in which she engaged in information behaviour. In addition of the examples above, numerous less explicit accounts of social and cultural values affecting the *outcomes* component of the sense-making metaphor were present within the data, and only emerged through the application of discourse analytic tools, as described above. The table provided in Appendix B summarises the salient points to emerge from this analysis.

6.2. Buddhism in Laos

Laos is a country with a rich cultural history that has long been tied to the country's official religion, Buddhism. As Lao people's culture and social environment are so closely tied with their religious beliefs, religion emerged as an important contextual factor affecting information behaviour. An awareness of the intertwined nature of Buddhism and Lao social and cultural values resulted in the inclusion of religion and its related beliefs as a sub-component of the primary contextual factors, rather than as a distinct secondary contextual factor.

Individual beliefs, faith, and devoutness vary on a personal level, however many of the accounts of information behaviour I collected included mention of the impact of Buddhism or divine providence on information behaviour at some stage of the sense-making metaphor. On the other hand, religion has not played a very significant role in most general studies of information behaviour emanating from Western contexts.

6.2.1. Religion and fortuity in information behaviour

Examples of individuals describing the role of religion in their information behaviour occurred in nearly every interview. Often, individuals described visiting temples or monks when they needed advice, consulting fortune tellers, or obtaining good luck blessings after making significant purchases. Other individuals described the role of religious beliefs in activities such as job seeking.

Nicole: Was there anything else that could have helped you?

Si: Maybe my fortune I think

N: Ok just luck, Buddha?

S: Yeah just pray to Buddha to help me. Yeah because for the interview day they have like a fortune teller come to my house, and I ask to do, like they check my fortune.

The above interviewee goes on to describe how the fortune teller told him he would be successful in his job interview. Similar interactions with religious figures and fortune tellers were reported in a number of incidents. This can be interpreted a number of ways. Participants described their belief in the influence of Buddha on other events in different ways. The following interview provides an example of how one participant viewed her success was related to metaphysical occurrences:

Nicole: You didn't get any bad advice?

Siphok: If in general I don't think it's bad, but someone said that "you should believe God". God is one part.

N: You mean Buddha?

S: Yeah God can make you succeed, you can go to the temple and pray, they suggest me.

N: So you don't agree with that?

S: I did, you know, I follow their suggestion,

N: But not successful?

S: I don't know, I think it's a part, now I think I believe about 10% about that, you know before after I pass the interview, its hard for me to get 5.5 too. You know the day that I took the IELTS test for NZ scholarship, I get up early, and then I went to Si Muang temple, and I prayed and prayed and it made me feel you know, feel you know warm, confident and more relaxed, and I took the exam maybe around 9 or 9:30, but finally, when I know the IELTS score, you know, I got 5.5, I think, oh I can't believe! I think that during the test I felt I couldn't do well, but I get 5.5, maybe from Buddha, yeah I thought that.

N: Did you ever go to talk to a fortune teller during that time?

S: Absolutely yes

N: And what did they tell you?

S: She told me, she is woman, she told me, umm, you can, she said you can, I predict that you can, and she said that you will travel far away from your hometown, and soon, at that time you know I got training scholarship from Singapore, and then I asked her again, what about New Zealand scholarship, 'Do you think that I can?, I will take IELTS test', she said that you can.

N: So that helped you to be confident?

S: Yeah I think so.

N: So in fortune teller, would you said you believe 10% or?

S: Yes, 10%, because I have to come back to consider not all fortune teller can predict right thing, but you know, not only her that I went to, but I went to fortune teller, many times. And many different fortune tellers, but only her that predicted correctly.

This excerpt provides an example of how the participant viewed the connection between a fortune teller's prediction and reality. Despite claiming to only believe in the validity of supernatural abilities 10%, the participant, a 31 year-old female, indicated that she had repeatedly and often visited fortune tellers. This kind of contradiction and uncertainty regarding the validity or value of this type of supernatural information was echoed by other participants, as in the following example:

Nicole: At that time did you ever go to the temple or see a monk and ask for good luck?

Sipha: No

N: You don't believe in it?

S: I respect but I don't believe, but I respect about this, but don't believe.

N: Do you believe in karma?

S: Yeah believe it, but sometimes the karma, baap (bad luck), now it turns on me sometimes. I know that. Sometimes my fiancée wants me to take her to the temple, and get the advice from the monk, because we want to know, if we live together, the situation will improve or not. Because now get trouble.

N: What kind of trouble?

S: Like financial trouble, and my mother-in-law, got thyroid cancer, and everything difficult come to me this year

N: Oh, I'm sorry.

S: So sometimes I believe in baap (bad luck) and sok (luck).

The above interviewee, a 31 year-old male, reported respecting religious beliefs, and emphasised the value of respecting tradition, yet he indicated he personally did not believe in Buddhism, and reported uncertainty regarding the effect of luck or karma on reality. Despite his professed scepticism, religion, karma and luck all influenced him in various ways over the course of the three information behaviour incidents he described. Again, this uncertainty and difficulty in maintaining this somewhat conflicting belief system was found throughout the interview data. The following excerpt provides another example of an individual who found his understanding of reality at odds with the cultural and religious values common in Laos.

Nicole: So, you don't go to the temple?

Saoet: Yeah I don't go, but I respect.

N: So what do you think about going to get a blessing for good luck from the monk or something?

S: It's quite superstitious, but for me, it depends.

N: So you don't think it works?

S: I didn't say that, but I mean, I just want to make sure about that, I mean sometime I did, someone to ask me just help me to buy this or help me to buy this and then you will see you will get how, fortune teller or something ok I help them, yeah it's good sometimes or sometimes bad, that's the way it is.

N: So do you ever go to a fortune teller?

S: Yeah

I: Do you believe what they tell you? Trust them?

S: Yeah, umm it's depends but sometimes we get something bad, we have to concentrate about ourselves and we have to carefully about, just before I don't know for sure whether its true or not, I went to fortune teller because my friend wants me to go with him, I never tried, so how was my

study, how was my career, how was everything my family my mom, how about did I, would I be able to win the scholarship to go to the US just before and they said you will, you will get the scholarship to study overseas and after that, I got the scholarship.

I: So you trust the fortune teller now?

S: Even though it's true, I'm not convinced.

I: So 50/50?

S: Yeah maybe 50/50.

The above interviewee, a 20 year-old male, describes how even though he had a fortune teller accurately predict his future, he's "not convinced" that it's a reliable source of information. Similarly to the interviewees described above, Saoet's understanding of reality conflicts with his core cultural assumptions, of which he may not fully be aware, as described by Cutler (2005) in his model of the "cultural onion". This conflict was found throughout the data, however, it was more apparent in accounts by participants who were young, and well-educated. Young, educated interviewees justified what they knew were superstitious beliefs by suggesting that religious activities had implications on the physical reality, though perhaps on a subconscious level, as shown in Siphok's interview above. Sao, a 19 year-old male, also rationalised religious activities, as in the excerpt below.

Nicole: At that time, did you ever go to fortune teller or go to temple for blessing?

Sao: Blessing of course, blessing. Of course. But I stick in my mind, for good luck.

N: Do you think if you had gone to the temple you would have had better luck with that job?

S: Yes, because if I go to the temple and ask god's blessing me, that mean that in my heart I ask, I am ambitious. I want the job I want the job! Maybe, if I don't go the temple, or do anything, that means I don't care the job.

N: So for your next interview, you plan to go to the temple?

S: Yes. Yes of course!

The above quotes provide examples of how participants' accounts include descriptions of karma and luck, and how these beliefs affected the information behaviour in which participants engaged. However the above accounts also provide evidence of how the participants rationalised their experiences with karma, luck, or fortune tellers, suggesting that these experiences had less supernatural implications.

6.2.2. Religion and active information seeking

One way that such reverence for religious or spiritual information appeared to influence information behaviour was by affecting the intensity of information seeking in which participants engaged. Rather than actively seeking information to resolve issues, individuals relied on deeply ingrained concepts closely linked to Buddhism such as karma and luck to resolve their information needs. This resulted in what appeared to be a resigned passivity that hindered the resolution of important information needs, such as serious health related concerns. As described in the in-depth exploration of Phet's incident, part of her health related information seeking behaviour included going to the temple and praying;

Phet: I always go to temple and pray, hope we have someone help us like magic, someone to help.

Another individual dealing with a health related problem also visited the temple and prayed in lieu of seeking other alternative information resources.

Saobet: I went to temple at that time, until now.

Nciole: A lot?

S: A lot, and I prayed, "I hope I will see some day", or my eyes getting better.

The participants' accounts indicate that they believed the power of their faith was sufficient sense-making behaviour to address the incident they described, rather than actively engaging in information seeking behaviour to help resolve their gap in knowledge. Ultimately, however, both of the above participants found that only by engaging in active information seeking were they able to resolve the health related information needs they were experiencing.

This research does not intend to discount the validity of religious beliefs nor make any judgements regarding the legitimacy of prayer as an information seeking activity. Nevertheless, the data showed that in the incidents where prayer was cited as a sense-making activity, ultimately the information needs were only resolved through other sense-making activities, such as the use of interpersonal networks for information seeking, as in the above two examples.

6.2.3. Summary of social and cultural influences on sense-making

Data analysis revealed the social and cultural contexts of the participants to be the primary contextual factors affecting information behaviour in Laos. As described in the preceding sections, the social and cultural contexts of the participants significantly impacted the sense-making behaviour described by the interviewees. Participants' accounts included explicit descriptions of social and cultural values affecting every component of the sense-making metaphor. In addition to the explicit examples provided above, the application of discourse analysis tools revealed embedded signs of the interviewees' social and cultural contexts, and how these contexts affected the ways in which interviewees built their reality in the seven areas described by Gee (2011a, 2011b).

6.3. Secondary contextual factors and their influence on information behaviour

In addition to the social and cultural contexts described above, a number of secondary contextual factors also influenced how individuals interacted with information in Laos. These secondary contextual factors emerged through the application of Gee's (2011a, 2011b) seven tools of discourse analysis related to the seven building tasks of language. The interviewee's accounts included descriptions of information behaviour being influenced by numerous contextual factors in addition to the two primary factors of social and cultural contexts, described above. Some of the secondary contextual factors present in interviewee's accounts included the physical contexts, the socio-economic contexts, and the political contexts of the participants. These secondary factors were present in multiple incidents, however they influenced information behaviours differently. The most important secondary contextual factors to emerge from data analysis are described below; however the list of contextual factors below is not exhaustive. Infinite additional contextual

factors were present to varying extents throughout the data, however in-depth examination of every contextual factor present in the data was beyond the scope of this research project.

6.3.1. Physical factors

Physical factors influence how individuals interact with information. These physical factors include the information resources available to the individual and the environment or physical location in which the information behaviour occurs, which impact information behaviour.

The interpersonal, physical or electronic resources available to an individual were described in every information incident collected during fieldwork. In the majority of incidents the information resources was an interpersonal source, such as a friend, family member, or colleague (see section 4.1.2). Access to these individuals was influenced by a number of factors, including social and cultural values, the political system, socio-economic status, and physical factors. Access to other resources, such as printed materials including books and newspapers, and electronic resources such as television or the internet, were also affected by the physical context of the individual. As described by Phet in Chapter 5, in the context of her information behaviour she did not have access to informed or educated interpersonal contacts, printed resources, or electronic resources. This lack of access with the result of her physical context, as well as a combination of other factors that resulted in a lack of information resources available to her.

Similar descriptions of how information resources, or a lack thereof, helped or hindered information behaviour in the majority of the information incidents collected. In nearly every incident in which the Internet was consulted as a resource, the participants demonstrated an awareness of how the access to this resource had affected their information behaviour. Access to other resources, such as the newspaper, was also described by multiple participants, and how a lack of access could act as a barrier, as described by an interviewee who had left his private sector position and was studying full time in the following interview excerpt, also used in section 6.1 to illustrate how social and cultural factors affected his use of the information resources:

Nicole: What about newspapers?

Sipsam: Not regularly, but sometimes, at the workplace, ok, but when you don't have an office, it's difficult.

Nicole: But before, did you read the newspaper more?

Sipsam: No no, it's very difficult, even now. I don't feel many [people], but some, but not all, have subscription for the newspaper, only offices.

This description of how physical access to newspapers impacted information activities is just one explicit example, however nearly every account contained some kind of embedded description of the role of access to resources played in their information behaviour. While the influences of the physical context on information seeking were found to be pervasive throughout the data, the extent of their impact is difficult to gauge, as a myriad of other factors also influenced access to resources, including the primary contextual factors found to affect information behaviour, and the social and cultural values of the individual. Nevertheless, the physical context of the individual does play a significant role in his or her information behaviour.

Interview data also contained both embedded and explicit descriptions of how physical factors such as the weather and seasonal variations in climate affected their habits and activities, which would also have consequences for information behaviour. Other physical factors, such as the terrain or availability of transportation also affected the participants' behaviours, and therefore the conclusion can be drawn that these factors would in turn affect information behaviour in individuals when these factors were present. For this reason, the physical context of an individual was found to be a secondary contextual factor affecting information behaviour amongst the participants in Laos.

6.3.2. Political system

The political situation is one ubiquitous contextual factor that has clear implications for information behaviour. Wilson (2006) elaborated upon the implications of political systems in his earliest models of information behaviour. He suggested that "the political system may define certain types of information as forbidden to particular groups (including the general public) and, consequently,

the non-availability of this material may affect performance in specific work roles" (Wilson, 1981 p. 665). The same may be said for non-work roles, or information behaviour in everyday life.

In the case of Laos, as a socialist state, certain information is restricted and the media outlets are tightly controlled.

Participants were aware of these restrictions and the lack of freedom of information that occurred in their country. As shown in the interview transcription below, this type of censorship is not considered oppressive or unusual.

Sipsong: We know the policy. The government doesn't want to report to make the Lao people unhappy with the nation, everyday drugs, everyday crime, rape, something of course it depends."

Nicole: Do you think the people would rather have the truth?

S: Truth about what?

N: All the crime, everything.

S: You know... I think if you are interested it's easy to get information, to get the truth, go to talk someone who knows about this. But if you're not interested, it's better to not have the stories.

The same interview goes on to describe how if a senior government official is found doing something wrong, the media will not report on the individual, but rather, the individual in question will quietly assume a different role.

Sipsong: For in Laos, one party state. Ok, if the minister or something did something wrong, just ok, minister ok no, we don't report. Maybe they just leave, they just like discuss among the party, change about this, don't have a file or anything. For example Vientiane's mayor, I don't know what's wrong, just change recently. I don't know his position now, it's lower.

This is just one example of how the political environment can impact an individual's access to information. However, the political environment has more far-reaching implications in addition to the most observable restrictions on access to information.

Certain participants indicated they did not feel comfortable talking about certain sensitive issues. Understanding why individuals were reluctant to talk requires some exploration of the impact and potential outcomes of dissidence in a one-party state.

6.3.3. Socio-economic status

According to the *Encyclopaedia of Sociology* (2001), all complex societies experience social stratification to some extent. Social stratification, or the forming of various social classes, is the result of “privileged individuals and families receiving a disproportionate share of power, prestige, and other valued resources.” (*Encyclopaedia of Sociology*, 2001, n.p.). Socioeconomic refers to the social and economic context of an individual, and an individual's socio-economic status is determined through the interaction of social and economic factors (Oxford University Press, 2010, n.p.), with a number of noteworthy implications.

Data revealed that in the example of Laos, an individual's station, class, or socio-economic status is an important factor in determining how he or she interacts with information. How socio-economic status affected information behaviour amongst the participants is explored in section 6.3.3. Questions directly related to salary or income were not asked, as a result of feedback from focus group participants described in section 3.3.1.4. While I did not specifically enquire as to an individual's yearly salary, responses to questions related to family history, profession and education level are all indicative of an individual's socio-economic status.

Interview data suggested that factors such as family history, education levels, and income levels also affected information behaviour. These factors are closely related and interdependent, often indicative of socioeconomic status. According to Geert Hofstede & Gert Hofstede (2005) “in most societies, class, education, and occupation are closely linked” (p. 48), suggesting that the three factors are “mutually dependent” (p. 48).

Individuals who had parents with professional careers often had higher educational levels than individuals with parents who were farmers or labourers. One interviewee reported wanting her daughter to achieve more than the interviewee herself had been able to do in her lifetime, and

encouraged her towards study and a career path that would result in a more well-paid and respected position. However, another interviewee reported feeling pride in continuing in the same profession as her parents, and being a part of a long-running family business.

The interviewee who reported desiring her children to have more education than herself was a secondary school teacher, who had done tertiary study in a teachers training college. The interviewee who aspired to the same career as her parents was a shopkeeper who had little formal education. Interviewees who came from more affluent families reported higher educational and career objectives. Interviewees from more affluent families were generally more well-educated than those from families that did not have the opportunity to receive extensive formal schooling. The interview instrument was not designed to explicitly capture socio-economic details with the intention of finding a correlation between education or income levels and information behaviour. Nevertheless, over the course of data collection and analysis, educational and incomes level emerged as being important contextual factors that affected how individuals engaged with information. Elaborating upon the specific relationship between education levels, socio-economic status and information behaviour would require further deliberate examination of these aspects of individual attributes.

Situational factors of the individual participants in this study are evidenced by certain demographic and documentary evidence gathered at the time of data collection. While specific data regarding socio-economic status was not gathered, however inferences can be made. Section 6.3.5 describes how these factors can limit access to information resources. However, it is worthwhile to examine how these factors may effect information behaviour using examples from my research.

Some of these factors related to the specific situation of the individual that were found to have an influence on information behaviour include:

- Economic resources,
- Education, basic literacy and literacy skills,
- Availability of necessary service infrastructure (e.g., libraries), etc

The exact implications of these factors, including a lack of economic resources, on information behaviour in Laos are difficult to measure. Separating the impact of a lack of economic resources from other factors, such as a lack of literacy skills or infrastructure is also difficult, as these factors are often found in conjunction with one another.

In some cases, a lack of ICT access, and knowledge of how to use the internet, acted as a barrier to effective information practices. When asked about the Internet, one interviewee reported “I never learned how to use it, and I didn’t go to school”. This type of contextual factor is most strongly related to the socio-economic status of the individual, however cultural and situational factors also affected access to ICTs and knowledge of their use.

6.3.4. Personal factors

The “personal factors” described by Yu (2010) and Julien and Michaels (2004) also affected information behaviour in Laos. As described in section 2.3.3, values and beliefs are part of a set of core cultural assumptions that are formed over a lifetime of socialisation in a specific group or community. These values and beliefs frame the environment in which information needs arise, and in which information seeking may or may not occur, depending on those individual personal factors.

While I analysed information behaviour amongst participants on an intra-individual level, I did not specifically aim to reveal intra-individual contextual factors, but rather develop an overall picture of how information behaviour was influenced by contextual factors in Laos. An examination of the specific personal factors that affected information behaviour within one individual may be a future direction of this research, however at present the extent of the analysis went only so far as to identify personal factors as an element of the context affecting information behaviour in Laos.

A number of participants described how “personal experience” had influenced their information behaviour, as shown in the following interview excerpt:

Samsip: Because we used to have in Laos, like always Thai bikes, but Chinese products like motorbikes is cheaper, but... we can drive but it doesn't last a very long time, it's not strong enough.

Nicole: So you had experience yourself like this? Or people told you?

S: I had Chinese bike before and Chinese one broke a lot.

N: So, personal experience?

S: I compare between Thai, it never breaks, and Chinese one, already fixed twice.

These experiences may have been negative or positive, and affected individual participants' information behaviour differently, including their decisions to trust a certain source, use a certain resource, or avoid a certain resource. Personal experiences such as these fall under the umbrella of Dervin's *situation* component of the sense-making metaphor, and are also often related to the social and cultural contexts of the individual. In excerpt above, the interviewee describes how she did not seek information related to Chinese motorbikes when she engaged in consumer related information behaviour, as she had had negative experiences with Chinese motorbikes in the past.

Participants also described how personal factors such as personality affected their decisions, as shown in the following excerpt:

Sipsam: Yes, but to me, my personality, I don't have any problems with the government. I can work with anybody, but I just consider many factors. In terms of economics, many factors influence the work I want to do. I imagine if I work with government, I think I cannot go very far, just ok, normal.

In the above excerpt, the interviewee's demonstrates an awareness of how his personality affected his information behaviour with regard to job seeking information behaviour. This is just one example of an explicit situation in which a participant's personality played a role in his or her information behaviour. An understanding of how other information behaviour incidents were similarly influenced by personal factors such as previous experiences or personality emerged through the application of discourse analysis tools to the data. This in-depth analysis of information behaviour incidents revealed that personal factors did indeed influence information behaviour amongst the participants, and therefore represents an additional secondary contextual factor that affected how people in Laos engaged with information.

6.3.5. Situational factors

Both personal factors and “factors beyond the control” (Yu, 2010, n.p.) of the individual affect information behaviour. The social and cultural factors described in section 6.1 are beyond the control of participants, yet are largely consistent amongst the participants. On the other hand, the personal factors described above, and the specific situational factors affecting information behaviour vary from one participant to another and often from one incident to another, even amongst the same participant.

This research has used the term *situational factors* to refer to specific features of a given situation that are “beyond the control” of the individual. It’s important to make the distinctions between situational factors and the individual’s broad information behaviour incident situation. For example, an individual’s socio-economic status or education forms part of her or her broader situation, whereas specific situational factors, such as a lack of access to resources, are unique to each incident. Situational factors can be related to an individual’s broader situation, as in the case of a lack of access to resources, yet they can also change from one incident to another.

The following interview excerpt provides some insight into how situational factors affected Phet’s information behaviour.

Nicole: So did you try to find other advice?

Phet: I didn’t ask any advice, because I still believe it’s only my daughter, so if I ask anybody, they won’t know, because no one in my village has the same problem.

N: In your village did you have access to newspapers or books or other resources?

P: Nothing. No newspaper, no books, no telephone, no television. Only radio, but actually they have access to radio there in the village, but my family didn’t have a radio, only at the neighbour’s house.

However, later in Phet’s life she experienced increased access to information resources such as TV, newspapers and books. Therefore the situational factor that affected her in the above mentioned information behaviour incident would not affect her in latter information behaviour incidents. However, her “history, experiences, horizons, constraints, barriers, habits and skills” (Dervin, 2008,

p. 17) do remain for the most part constant throughout her lifetime, or shifting only gradually, as she gains new experiences or habits. The distinction therefore is between the specific variable situational factors that affect an information behaviour incident at the time of the sense-making activities, as opposed to the overall sense-making situation of the individual, which vary only gradually over time.

The above mentioned situation factor present in Phet's incident is also related to her physical context. Other situational factors affecting information behaviour present in interview data included serendipitous information access, in the example of the interviewee who received advice from his friend via online chat without prior planning. The situational factors reported by interviewees were often related to a number of other, specific factors such as physical context or socio-economic context, yet varied considerably from one situation to another.

These variable situational factors were also determined to have an affect on information behaviour amongst the participants, and therefore constitute an additional secondary contextual factor that affected information behaviour in Laos.

6.3.6. Summary of contextual factors' influence on information behaviour in Laos

The findings that emerged from the third phase of analysis provided evidence of the relationship between information behaviour and the contextual factors that affected it in Laos. The contextual factors affecting information behaviour can be summarised as consisting of a number of primary and secondary factors, each affecting information behaviour differently. These factors are listed in Table 17 (page 138).

As described above, interview data revealed that the social and cultural contexts of the participants had the most significant effect on their information behaviour. Religion is included above as a primary factor, as religious beliefs were also discovered to have a strong influence on information behaviour, yet it is extremely difficult to distinguish between social, cultural and religious values in the Lao context, as Buddhism is a national religion and has exerted a strong influence on the entire Southeast Asian region for more than a millennium.

The secondary factors described above also affected information behaviour to varying degrees in each information behaviour incident collected. Interview data revealed that the physical environment and information resource base available to the individual affected his or her information behaviour, as did the single-party communist state political system in place, socio-economic factors, personal factors, and situational factors. These secondary contextual factors affected information behaviour to varying degrees depending on the nature of the information behaviour incident. The implications of the relationship between the above mentioned primary and secondary contextual factors described above is discussed in the following section.

6.4. Summary of findings

The findings reported in Chapters 4, 5 and 6 are the results of three primary phases of analysis with the objective of responding to the research questions described in section 1.4. With this aim, the first phase of analysis identified the information behaviours that occurred amongst the participants in the incidents they described. The sense-making metaphor provided a framework from which common behaviours could be identified and described. The results showed that while the individual components of sense-making varied widely, certain commonalities existed from which conclusions could be drawn.

Following the identification of the information behaviours occurring in the interview data, the second phase of analysis used discourse analysis techniques to identify the contextual factors present in the interview data. This method revealed a number of contextual factors contributing to the seven building tasks of language that participants used to describe their perceptions of the world around them.

The final primary phase of analysis consisted of identifying the relationship between the information behaviours identified during phase one of analysis, and the contextual factors that emerged as being significant in phase two of analysis. The identification of this relationship was accomplished through the use of discourse analytic tools and the sense-making metaphor as analytic tools.

The findings above provide evidence that support the conclusion that the social and cultural contexts of the participants exerted the strongest influence on their information behaviour. The implications for this finding, and its relevance to existing theory and literature are provided in Chapter 8.

Chapter 7 **Discussion**

In this chapter, I use the findings to address the research questions, assessing the outcomes in terms of both their implications regarding existing information behaviour theory, and their contributions towards extending that theory.

I also consider the applicability of the research methods as a tool for further investigation into the contextual factors affecting information behaviour in diverse contexts, addressing the secondary objective of the research.

7.1. Findings in relation to selected research paradigm

In this study I employed a qualitative research method informed by a relativist ontology and interpretivist epistemology. Lincoln and Guba (1994) emphasise how a relativist ontological perspective conceptualises reality as a “multiple, intangible mental construction, socially and experientially based, local and specific in nature, although elements are often shared among many individuals and even across cultures” (p. 110).

Each participant in this study expressed his or her interaction with information differently, articulating the reality of the specific information behaviour incident they experienced from a subjective perspective. While there may be similarities in how individuals from the same society or culture perceive or articulate the reality they experience with regard to information behaviour, those realities are still subjective; that is, they do not exist independently of the individual who experiences it, nor is there one “true” reality. The findings demonstrated that when participants who experienced a particular information need went about making sense of the gap in their knowledge, they did so based on their social and experiential context.

The interpretivist epistemological stance upon which the research method was based is also reflected in the findings of this study. Fitzgerald and Howcroft (1998) described an interpretivist epistemological stance as conceptualising truth as being subjective. Fitzgerald and Howcroft (1998)

also suggested that context plays an important role in developing findings based on this assumption that there is no universal truth, but rather that data must be interpreted and conclusions drawn accordingly. The participants' descriptions of their information behaviour could only be interpreted qualitatively, and the findings that emerged do not represent an absolute truth or reality. Rather, they are the conclusions I have come to based on the application of the research tools I selected, and filtered through my own social and experiential context. Nevertheless, the interpretation of the findings does provide useful insight that can further our knowledge and understanding of information behaviour in diverse contexts.

Likewise, the participants' descriptions of their information behaviour provided me with the participants' understanding of the truth, and their understanding of the nature of knowledge. The participants also understood and interpreted my questioning through their own frame of reference, and provided me with responses that reflected this mutual interpretation of our communication. This mutually interpretive nature of the research is evidenced throughout the data and findings. Interpretation occurred frequently throughout the data collection, as interviewees strove to understand the nature of my questions, as I strove and sometimes struggled to understand the nature of their responses. Interpretation also occurred during the analysis phase, as I interpreted the data to develop an overall understanding, and found patterns and commonalities amongst the varied accounts. Ultimately I have concluded that there is no universal truth of information behaviour, and that a universally accurate model of information behaviour would have to be very broad and conceptualise information behaviour at a level without a great deal of detail in order for it to be relevant in all contexts. Section 7.2.1 contains further exploration of the feasibility of a universal model of information behaviour.

The theoretical framework of social constructionism also played a significant role in the development and the undertaking of this study. The belief that information behaviour is manifested individually, but the product of the social environment, in conjunction with internal individual components, is supported by the research findings. The findings revealed that social and cultural contexts played a significant role in how people interacted with information. In addition, as discussed in section 6.3, secondary factors such as individual or personal factors also acted in

combination with the social environment to produce variations in information behaviour. As suggested by Berger and Luckmann (1966), the social environment was found to play a critical role in the construction of meaning and experience amongst the participants.

7.2. Addressing the research questions

This research investigated information behaviour in Laos, a non-Western, developing country in order to address the following research questions:

- 1. What are the contextual factors that influence everyday information behaviour of individuals in Laos?**
- 2. How do these factors influence the everyday information behaviour of individuals in Laos?**

The following sections will address each of the research questions respectively, with regard to the literature reviewed in chapter 2, and the findings that emerged from data analysis.

7.2.1. The contextual factors that influence everyday information behaviour of individuals in Laos

From my analysis of the data, I identified a range of contextual factors that affected information behaviour amongst the participants. I categorised these contextual factors into two broad categories of primary factors and secondary factors based on the degree of influence they exerted on how an individual engaged with information.

- Primary factors
 - Social context
 - Cultural context
 - Religious context
- Secondary factors
 - Physical context
 - Socio-economic context
 - Political context

- Personal context
- Situational context

These broad categories and the individual contextual factors affected information behaviour amongst the participants, but also affected and influenced each other. This mutually informing relationship resulted in a dynamic set of factors that on the whole, provided the unique overall context in which information behaviour in Laos occurred.

After applying discourse analytic tools to the data it emerged that the social and cultural contexts played the greatest role in how the participants engaged with information behaviour. Upon careful inspection of the contextual factors' effects on information behaviour it was difficult to separate the effects of the closely related dimensions of social, cultural and religious context. Initially Buddhism or religious values appeared to be a secondary contextual factor. However, upon closer consideration, it became apparent that the religion and the social and cultural dimensions were too closely and inter-related to be considered as distinct separate factors.

Data analysis also revealed a number of secondary factors including the physical, socio-economic, political, personal and situational context which also influenced information behaviour, though to a lesser extent. The primary contextual factors that influenced information behaviour amongst the participants are explored below, followed by an exploration of the secondary factors.

7.2.1.1. Social and cultural contexts as primary factors

From the analysis of the participants' accounts of information behaviour it became evident that their social and cultural norms exerted the strongest influence on their decisions regarding how to interact with information. Distinguishing the social context from the cultural or religious context within the interview data was not feasible, as these three dimensions of context are so closely related and interdependent.

According to Geert Hofstede and Gert Hofstede (2005) culture is a collective phenomenon that is "shared with people who live or lived within the same social environment, which is where it was learned" (p. 4). Geert Hofstede and Gert Hofstede (2005) also suggested that individuals develop

basic beliefs and values early in life through socialisation and education, and share these values and perceptions with other members of their society. Geert Hofstede (1980) identified five dimensions of culture with implications for intercultural communication, summarised in the literature review. These dimensions of culture provide a useful set of tools from which conclusions regarding the findings of the research can be evaluated with regard to existing literature and theory. The dimensions of culture most relevant to information behaviour in Laos are explored in the following sections.

Society and culture are very closely related concepts, and as discussed by Carl et al. (2004), religious belief system is one of the primary indicators for the power distance cultural dimension. In the case of Laos, Buddhism is the official religion, and deeply ingrained in daily behaviours of Lao people. For this reason, the religious values associated with Buddhism constitute a shared system of beliefs, values, customs and behaviours that are transmitted from generation to generation, and therefore are indistinct from the cultural context.

The findings, supported by the literature reviewed in Chapter 2, confirmed that individuals learn how to interact with information from those around them. Their parents, caregivers, teachers, peers, and larger community continually provide models of how everyday information needs are to be addressed and resolved. The data indicated that these learned patterns of information behaviour shift over time. As new technologies emerge, early adopters provide new examples of information behaviour to those around them; as new knowledge or understanding is gained, new channels of information sources become available. However, despite new ways of interacting with information, certain overarching values affecting information behaviour patterns generally remain the same. This was reflected in the reliance on the Internet for certain kinds of information behaviour by the participants, though the social and cultural values still influenced how they articulated and responded to their information needs.

The social context in which patterns for information behaviour are learned is equally influenced by core cultural values that affect the ways individuals go about resolving their information needs, the sources they commonly turn to, even how they perceive the information around them, and use it to

resolve their needs. These cultural values affect information behaviour on multiple levels, similar to Cutler's (2005) cultural onion described in section 2.2.5.

Many of these cultural factors acted below conscious levels to affect information behaviour, similar to deep levels of grammar and syntax in language, of which a native language speaker is seldom aware (Cutler, 2005). On the outer layer, there are overt examples of how cultural values influence individual's information behaviour; for example certain information sources are considered taboo. On a less overt level, implicit, unspoken understandings of social norms may govern access to certain types of privileged information. On an even less overt level, acculturated perceptions of class and social structure may affect an individual's ability to evaluate information sources. All of these factors influenced information behaviour in different ways in the case of Laos, resulting in certain features of information behaviour emerging as commonly occurring and worthy of further investigation. These features of information behaviour affected by contextual factors are discussed in the following section.

The following three levels of investigation of culture identified by Scott and Marshall (2009) were used in differentiating how social and cultural contexts affected information behaviour in the interview data:

1. Learned patterns of behaviour;
2. Aspects of culture that act below conscious levels
3. Culturally determined patterns of thought and perception (n.p.)

At the first level, those social and cultural values that were acquired and learned over the course of the participant's lifetime, of which they are aware, are reflected through the interview data. As discussed in section 6.1, often participants specifically described their awareness of how culture or Lao society influenced them in their behaviours.

At the second level, the aspects of culture that acted below conscious levels also affected information behaviour, and were embedded within the data. Examining grammar and syntax in language is a component of the discourse analytic method. Though this method's value was limited

due to the communication being done in some participant's non-native language and for some through a translator, it nevertheless provided a useful perspective from which to consider the findings. These aspects of culture that act below conscious levels are the aspects of context that a native researcher may have difficulty recognising. In this sense, I had an advantage as an outside researcher. I was able to examine these subconscious aspects of culture and society that may not have been apparent to those investigating information behaviour from the same cultural background as the participants. While it was not necessary to have the perspective of an outside researcher, an awareness of these subconscious cultural and social values present in the community under investigation was critical to effectively developing a clear picture of the contextual factors affecting information behaviour.

At the third level the patterns of thought and perception shared by a culture were also a key concept in Cutler's (2005) and Geert Hofstede and Gert Hofstede's (2005) work, as well as other scholars including Bourdieu (1986). These shared patterns of thought and perception also affected how individuals engaged in information behaviour. I undertook the research and data collection with the objective of uncovering these shared patterns of thought and perception. For this reason used Dervin's sense-making micro-moment time line interview technique in order to capture evidence of these shared patterns of thought and perception. Dervin's SMM, and the micro-moment time line interview technique she developed, is specifically intended to capture contextual factors affecting information behaviour.

Interview data provided explicit and implicit examples of how information behaviour was affected by social and cultural values. These social and cultural values were revealed through in-depth analysis of the participants' discourse. Gee's (2011a, 2011b) discourse analytic method for identifying how individuals use language to construct reality around them in seven areas was the primary framework from which understanding of these values was made possible. As described in section 3.3.4.1, the seven building tasks of language are significance, practices, identities, relationships, politics, connections, and sign systems and knowledge.

The cultural dimension of power distance and its implications

Power distance emerged as the most significant dimension of culture in terms of affecting how individuals interacted with information. Geert Hofstede and Gert Hofstede's (2005) dimension of *power distance* relates to the extent to which individuals assume or tolerate an unequal distribution of power. It reflects the degree to which a community maintains inequality among its members by the stratification of individuals and groups with respect to power, authority, prestige, status, wealth, and material possessions (Geert Hofstede & Gert Hofstede, 2005).

Evidential data including statistics of internet adoption as provided in section 2.5.1 confirmed existing research which found that countries with high power distance values adopt new information and communication technologies more slowly than those with lower power distance values (Khalil & Seleim, 2010). Laos, a high power distance society, lags behind many Western nations in availability of access to the Internet. My research found that those interviewees who had experienced more exposure to lower power distance societies, through living or studying overseas, or through friendships with non-Lao people in Vientiane, were more likely to use the internet for information seeking or communicating than others with less exposure to Western culture. These findings are consistent with Khalil and Seleim's (2010) investigation of cultural dimensions and information behaviour which found that high power distance societies tended to strictly control the flow of information, which is reflected in lower usage rates for ICT in high power distance societies. The dimension of power distance also affects how people seek and use interpersonal information.

Additional dimensions of culture and their implications

Other dimensions of culture identified by Geert Hofstede and Gert Hofstede (2005) also had a strong impact on how individuals interacted with information. This includes the dimensions of individualism and uncertainty avoidance. The individualism index (IDV) developed by Geert Hofstede scores a society on the extent to which it promotes individualism or collectivism amongst its members. A highly individualist society such as the United States people are expected to have private opinions, individual interests prevail over collective interests, per capita GNP tends to be higher, everyone has a right to privacy, and autonomy is the ideal (Geert Hofstede & Gert Hofstede, 2005, p. 109). In countries with a low score on the individualism index, or those that are highly

collectivist, such as Thailand and Guatemala, harmony and consensus in society are ultimate goals, the state holds a dominant role in the economic system, and opinions are predetermined by group membership (Geert Hofstede & Gert Hofstede, 2005, p. 109).

Dorner and Gorman (2011) employed a formula using the values identified by Hofstede for Thailand and Vietnam to estimate scores for Laos. In addition to the power distance dimension, Dorner and Gorman (2011) emphasised the individualism index, suggesting that the projected scores for Laos varied strongest from Western societies in these two dimensions. Dorner and Gorman (2011) projected low scores for Laos on the individualism scale, suggesting a culture that is highly collectivist. Both Geert Hofstede and Gert Hofstede (2005) and House et al. (House et al., 2004) found that East Asian cultures were more strongly collectivist than Western countries, which supports Dorner and Gorman's (2011) hypothesis. Interview data in my research also revealed behaviours and attitudes amongst the participants that aligned with the collectivist values described in Geert Hofstede's work.

The majority of the interviewees described living with extended family members, in large households. This upbringing and living situation corresponds to Geert Hofstede and Gert Hofstede (2005) observation that "in most collectivist societies, the family within which the child grows up consists of a number of people living closely together" (p. 75). Geert Hofstede and Gert Hofstede (2005) also describes how collectivist societies tend to rely on high-context communication, or communication scenarios in which "little has to be said or written because most the information is either in the physical environment or supposed to be known by the persons involved, while very little is in the coded, explicit part of the message" (p. 89). The interviewee's descriptions of their information behaviour were consistent with Geert Hofstede and Gert Hofstede's (2005) observations, as individuals who reported using very explicit information were most often interacting with Western information sources. Local information sources tended to be less explicit and more imprecise. The lack of book culture and the small number of participants in my research who reported using print materials are also consistent with a high-context communication society that values collectivism, suggesting that Lao people do not perceive a strong need to codify information, unlike individualist societies.

7.2.1.2. **Secondary contextual factors in the case of Laos**

The following contextual factors also had notable effects on information behaviour amongst the participants, though as every information behaviour incident was unique, how these contexts affected information behaviour varied considerably from one incident to another.

- Physical context
- Socio-economic context
- Political context
- Personal context
- Situational context

Section 6.3 provides specific examples from the interview data that demonstrate how each of these contextual factors affected information behaviour amongst the participants.

7.2.2. Summary of the contextual factors influencing information behaviour in Laos

Through the analysis and interpretation of the interview data, I was able to identify a number of primary and secondary contextual factors that affected information behaviour of individuals in Laos. Two contextual factors that emerged as having the most significant impact on information behaviour were the social values, and cultural values of the individual. Secondary contextual factors included the physical and political contexts of the information behaviour incidents. Identification of these primary and secondary contextual factors explored above provided a basis from which the effect of the contextual factors upon information behaviour amongst the participants could be explored, addressing the second research question. The response to this research question is explored in the following section.

7.2.3. How contextual factors influence everyday information behaviour of individuals in Laos

The examples given in Chapters 4 and 5 provide some evidence of how the primary and secondary contextual factors affected information behaviour amongst the participants. The following broad

themes emerged as the primary features of information behaviour affected by contextual factors in Laos:

- The nearly ubiquitous preference for interpersonal information;
- A lack of active information seeking and avoidance of certain types of information and information sources;
- Implicit trust in most interpersonal sources of information, such as a lack of critical evaluation of information sources;
- Respect for tradition influencing information behaviour;
- Decision making based on incomplete information.

The above list is not exhaustive, but represents the most commonly found features of information behaviour found amongst interview data. Each of the above features was influenced by the contextual factors present in the incident. In addition, each of the features of information behaviour described above that was identified during analysis is influenced by a complex system of interconnected contextual factors. The following sections examine the primary and secondary contextual factors' effects on information behaviour, followed by an in-depth discussion of the existing theory relevant to the above mentioned features of information behaviour in Laos.

A number of existing models of information behaviour do not explicitly consider the role of contextual factors. Wilson's revised "model of information behaviour" (Figure 7

Figure 7, p. 39) conceptualises contextual factors as affecting the individual who engages in information behaviour, as well as certain contextual factors as "intervening variables", essentially barrier and enablers influencing information behaviour.

Dervin's Sense-making metaphor, (Figure 8 p. 42) considers context an umbrella under which information behaviour occurs.

My findings are consistent with Dervin's and Wilson's conceptualisations of context. My findings also extend the understandings of how context influences information behaviour, which is often underrepresented in information behaviour models, or ambiguously defined.

I found that a combination of primary and secondary contextual factors influenced information behaviour in complex and interrelated ways. The primary factors, i.e., the social and cultural context of the individual, exerted the most significant influence on how individuals engage with information. The secondary factors often acted as barriers or enablers, similar to what Wilson (2005) describes as “intervening variables”.

In this sense, Wilson’s conceptualisations of context in both his earlier and revised models provide an accurate visual depiction of the role of context in information behaviour, as does Dervin’s Sense-making metaphor. These models have been produced based on research and evidence from Western contexts, and reflect the influence of contextual factors in a Western, developed world context. This study extends these models and theories regarding the role of context in information behaviour by exploring it from a non-Western, developing country perspective.

The following sections further explore how these primary and secondary contextual factors influenced information behaviour amongst the participants of this study.

7.2.3.1. Primary contextual factors’ influence on information behaviour

Social and cultural values

The theory that socio-cultural values and practices of strongly influence how individual members of a society behave and perceive the world around them have been elaborated by a number of scholars (e.g. Berger & Luckmann, 1966; Bourdieu, 2003). My research findings support this theory in that the social and cultural contexts of the participants had the strongest impact on their information behaviour.

One of the primary social and cultural factors that affected how individuals interacted with information was the influence of Buddhism in Laos. Carl et al. (2004) suggested that “from a power distance perspective, Buddhism is somewhat fatalistic, but on the whole, neutral” (p. 522). This inclination towards fatalism can have implications for information behaviour, especially with regard

to the lack of active information seeking behaviour, and the implicit trust or lack of critical evaluation of information sources found in the interview data. This fatalistic attitude is just one example of how overarching social and cultural factors affected information behaviour in various ways. Section 6.1 of the findings provided specific examples from interview data of how social and cultural factors affected information behaviour amongst the participants.

Through the data analysis and interpretation I found that that the social and culture context of the participants played a significant role in their information behaviour. Khalil and Seleim (2010, p. 129) found that differences in cultures influence a variety of social phenomena, including information generation, presentation, transfer and use and "information dissemination capacity". This term was developed to describe "the extent to which information is accessible to people and institutions in a society via communication channels and media" (Khalil & Seleim, 2010, p. 127).

Menou (1983) also found that information behaviour was influenced by culture, suggesting that "the production of information materials is deeply interwoven with cultural patterns as to the elements of knowledge which need to be transferred, the organization of information, its physical presentation and the quantity of information to be produced" (p. 124). Steinwachs (1999) also asserted that in developing countries these cultural factors have even greater implications than elsewhere, as "much of the information available...originates from different cultural backgrounds and is therefore only partly relevant to the information seeker" (p. 199). Steinwachs's observation was found to be accurate in the context of Laos, where I found that the majority of formal information sources available to the participants was neither in the Lao language, nor created within a Lao cultural context. Menou (1983) went so far as to suggest that "information is culture specific and, consequently, is largely uncommunicable unless it has been 'acculturated'" (p. 121). However, Menou did not provide any suggestions for rendering information completely culturally neutral, which may be an impossible task. Menou also advised that "it should be kept in mind that today's production of information is largely a corporate activity" (1983, p. 123), an observation that continues to bear relevance when considering information needs, seeking and use in developed and developing countries.

The findings of the current research support the ideas put forward by scholars such as Menou (1983), Khalil and Seleim (2010), and Steinwachs (1999). The empirical evidence I collected in Laos demonstrates that the socio-cultural context had a significant impact on information needs, generation, transfer, use, presentation, and dissemination. The assertion that information is not culturally neutral, as put forth by Menou (1983), was also a reoccurring theme throughout the data analysis. The findings described in section 4.1 provide an example of how, due to its cultural relevancy, locally generated information was used in certain situations as opposed to information from the internet or non-local sources. This is consistent with findings by the scholars above, as well as sociologists and cultural anthropologists such as Geert Hofstede (1980), Geert Hofstede and Gert Hofstede (2005) and House et al. (2004) who also observed the effects of culture on information behaviour, and the closely intertwined nature of social environment and cultural values.

7.2.3.2. Secondary contextual factors' influence on information behaviour

While the cultural and social factors described in section 7.2.1.1 emerged as the primary contextual factors affecting information amongst participants, other contextual factors also played a significant role. In particular, the tendency for participants to make decisions or reach conclusions based on incomplete information was often related to the physical context, and a limited information resource base available. These features, their implications, and relevant theory and literature are explored below.

Physical context

In my analysis of the data, I found that the physical context of an individual engaging in sense-making had a significant impact on his or her information behaviour. In particular, the aspect of the physical context with the greatest impact on information behaviour was physical access to information resources. Section 6.3.1 provides specific examples of how the physical context affected information behaviour in several incidents. Some examples include:

- Physical access to information sources

- Weather and seasonal variations in climate
- Terrain or availability of transportation.

The physical context had either an enabling or hindering effect on the participants' information behaviour in Laos. A lack of access to resources or other physical barriers often resulted in inefficiently or ineffectively resolved information needs. The physical context also facilitated information behaviour, depending on the information incident and physical context in question. Regardless of its positive or negative influence, physical context nevertheless emerged as having a significant impact. My findings were consistent with researchers such as Savolainen (2009b), Chatman (1999), and Fisher writing with a number of associates (Fisher & Landry, 2007; Fisher, Naumer, Durrance, Stromski, & Christiansen, 2005; Meyers, Fisher, & Marcoux, 2009) who also found physical environment to have affected information behaviour. In addition, Wilson's (1999) model, provided in

Figure 7, describes the physical or environmental context as being an important factor in information behaviour, acting as an "intervening variable".

Socio-economic context

The socio-economic status of the participants in my study also affected the choices and decisions they made regarding information. While the research did not specifically collect data regarding socio-economic status, interpretation of the data permitted some insight into how socio-economic status affected the ways in which people needed, sought and used information. Specific examples of how the socio-economic context of an individual affected his or her information behaviour are provided in section 6.3.3.

Early studies into information behaviour, such as the one conducted by Wilson (1981), found that socio-economic status has a perceptible impact on information behaviour. Wilson suggested that "the economic climate and the differential stratification of resources will define some work environments as "information-poor" and others as "information-rich", with consequent effects upon the probability of information-seeking behaviour and the choice of channel of

communication" (Wilson, 1981, p. 665). The concepts of economic climate and information poverty are also explored by Chatman (1996, 1999, 2000) and Yu (2010). Data analysis revealed that Yu's (2010) findings regarding the economic and infrastructure factors in China were also present in Laos. Yu and Chatman's findings are discussed with regard to information poverty in section 7.3.2.

Scholars such as Cullen (2001) and Sonnenwald et al. (n.d.) are amongst the many that explored the role of socio-economic status in information behaviour, suggesting that higher socio-economic status was related to more effective information practices. My findings confirmed that individuals from more privileged socio-economic backgrounds were able to resolve their information needs more effectively. Wilson (1999) also included socio-economic status as an "intervening variable" that affected information behaviour in his model of information behaviour.

Political context

My research findings provide evidence that the political context of an individual or the specific information incident under examination affects his or her information behaviour.

Section 6.3.2 provides some specific examples of interview data describing how political factors influenced participants' behaviours and perceptions.

The political context exerted a stronger influence on the participants over 40, and those from lower socio-economic statuses. Scholars have investigated the role of political context on information behaviour, with extensive research having been conducted on the effects of political censorship on access to information, an important dimension of information behaviour. Murdock and Goulding (1989) and Villeneuve (2006), for example, found that political censorship and a lack of intellectual freedom are barriers to effectively resolving information needs, and impeded effective information behaviour. The majority of participants reported a lack of transparency or complete news coverage present in state controlled media outlets, limiting their knowledge of current events.

Situational context

Situational factors were also found to have an influence on how individuals interacted with information in Laos. Specific examples of situational factors affecting information behaviour are provided in section 6.3.5 and include specific features of a certain information behaviour incident, such as serendipitous information. Situational factors were found to have either an enabling or hindering effect on information behaviour, and refer to specific circumstances present in one information behaviour incident that are not consistent across multiple incidents reported by the same individual. While the situational factors present were closely related to the social and cultural contexts of the individual, their varying and transient nature required them to be considered as a separate contextual factor. My findings support research by Yu (2010), Allen (1997), Julien and Michels (2006) and others who have also found situational factors to affect information behaviour.

Personal context

Examination of the interview data resulted in the identification of personal factors as playing a role in how individuals interacted with information. Section 6.3.4 provides some specific examples from the participants which provide evidence for this finding. Personal factors emerged as having either a negative or positive influence, hindering or enabling effective and efficient information behaviour depending on the information incident. Personal experiences, and individual personality were reported by interviewees as having an impact on how they interacted with information, in some cases hindering their information behaviour, and in others, acting as an enabler to resolving their information needs. Yu (2010) and Julien and Michels (2004) also explored the role of personal factors in information behaviour, and found them to have a significant impact, as did the findings of the current research.

Yu (2010) suggested that usership of some information resources and services is affected by “personal factors (e.g., lack of interest)” (p. 18), however she goes on to suggest that more often, a lack of usership is due to factors beyond an individual’s control, “e.g., lack of economic resources, lack of basic literacy and skills, lack of necessary service infrastructure (e.g., libraries). (p. 18)”. However, personal factors did emerge as playing a significant role in information behaviour amongst the participants of my study, as well as the factors beyond the individual’s control.

As described in section 2.2.6, Julien and Michels (2004) investigated intra-individual information behaviour, in order to investigate “relevant aspects of situation and relevant personal characteristics (e.g., personality) which vary across individuals” (p. 548). The findings of the current study are consistent with those of Julien and Michels (2004) who found that “personality characteristics, and habitual patterns of information behaviour will heavily influence the patterns and variation found for one individual.” (p. 551).

7.2.4. Summary of how contextual factors influence information behaviour in Laos

Consideration for the research findings in relation to existing literature and theory confirmed that social and cultural values play a significant role in shaping how individuals in Laos need, seek and use information. In addition, secondary contextual factors also affected information behaviour amongst participants, often acting as either a barrier or enabler.

These facilitating or hindering effects of contextual factors such as physical environment and personal and or situational factors have been examined by information behaviour scholars including Wilson (1999).

However, in my research I found that the primary and secondary contextual factors combined form a complex and interrelated system that influences information behaviour in different ways. Certain factors act as “intervening variables” (Wilson, 2005) enabling or hindering information behaviour, and others influence broader decisions, choices, and preferences, combining to influence every aspect of information behaviour.

In particular, the cultural and social aspects of the individual's context affected how he or she engaged with information in parallel with a multitude of other factors, in a dynamic and complex interrelated manner that is often somewhat ambiguously represented in a two-dimensional model of information behaviour. While Dervin and Wilson's models take the role of context into consideration, and provide an accurate depiction of how context influences information behaviour, the depiction of context in information behaviour models has thus far been somewhat inexplicit,

drawing solely on research from Western contexts. This study further extends the theories regarding the role of context in information behaviour by examining it in a non-Western context, and explicitly articulating the role of context in information behaviour.

An interpretation of the findings of this study, considered along side existing models and established theories, has resulted in the conclusion that multiple contextual factors interact at numerous levels to influence information behaviour in many different ways. Unique features of every individual information behaviour incident are affected by these contextual factors differently. Therefore, the development of a universal model of information behaviour that explicitly articulates the role of contextual factors in information behaviour is a unrealistic objective. The findings therefore revealed that both Wilson's and Dervin's models can be considered useful even within a non-Western context, as the role of context in information behaviour is very broadly articulated.

However, in-depth investigation of how individuals interact with information in different local contexts can help us identify the primary features of information behaviour that have relevance within a specific context or community. These features can be used to develop an understanding of information behaviour and explicitly articulate the role of context in information behaviour within a given specific context. The following section explores these features in the context of my research.

7.3. Overarching features of information behaviour in Laos

Analysis of the data and the identification of the primary and secondary contextual factors and how they influenced information behaviour resulted in the emergence of a number of distinctive features of information behaviour in Laos. These features are described below, with regard to existing literature.

7.3.1. Preference for interpersonal information

The majority of the participants reported a preference for interpersonal information. This finding correlates strongly with existing information behaviour research, such as studies conducted by Harris and Dewdney (1994), and Fisher et al. (2005), and Case (2012), and others who similarly

found that individuals prefer to use informal sources for seeking everyday information. As mentioned in the introduction to this thesis, the majority of these studies were conducted in North America, however before the widespread adoption of the Internet for communication. Recent studies have shown that the preference for interpersonal information is shifting to electronic sources in the developed world, as discussed in Fisher et al.'s 2005 study. Fisher et al. (2005) found that this shift towards electronic resources was an "emergent phenomenon that is displacing the long-standing tradition of the strong-tie, interpersonal source" (n.p.), and suggested further research in this area. This shift away from interpersonal sources may become more pronounced in investigations of information behaviour across the developing world as Internet adoption rates increase.

While the data did show evidence of this shift beginning to occur in Laos, for the time being the strong preference for interpersonal information continues to exist. The Lao data revealed similarly to Case's (2012) findings, "many people use formal sources rarely, relying instead on informal sources such as friends and family, or knowledgeable colleagues at work" (p. 289). Fisher et al.'s (2005) study revealed "that those seeking everyday advice...preferred a close personal tie, while people who sought information related to hobbies and/or travel turned to the Internet". Fisher et al. (2005) also found that the Internet was slightly preferred over interpersonal sources of information for those seeking health care information (n.p.). Similar studies of young people using Savolainen's ELIS framework revealed "teens identified friends and family as their preferred information sources and cell phones as their most preferred method of tool-mediated communication" (Meyers, Fisher, Marcoux, 2009 p. 305). Meyers et al (2009) found that interpersonal peer sources were highly salient, which resonated in the accounts of both young and old interviewees in the current study. Meyers et al. found that the young people they investigated regularly consulted other peers early in the information-seeking process, and that they often shared interpersonal information by telephone, text message, instant messaging and e-mail. Overall, Meyers et al. (2009) found print sources less popular than electronic and interpersonal sources, as was mass media such as TV and radio amongst the young people they interviewed (p. 316).

The findings of my study are consistent with these findings, as interviewees reported similar preferences for interpersonal and peer sources, however the prevalence and use of electronic sources had perhaps not reached the extent of popularity as reported by Meyer's 2009 study, as printed resources were consulted in equal numbers with electronic sources. This is perhaps due to a lack of internet access and electronic resources in the Lao language, as described in section 2.5. Meyers et al. (2009) also found that "visceral affective criteria emerged as important components of how tweens assess interpersonal information" (p. 323), which also emerged as playing a factor in information behaviour in Laos. According to Meyers et al. (2009), the young people they investigated "used notions of credibility and trust, as well as of the social costs associated with information-sharing, as important factors in deciding whom to consult and with whom to share information" (p. 323). These findings align strongly with the other features of information behaviour identified to be present in the Lao context, in particular with the concepts of information avoidance put forward by Chatman (Chatman, 1996, 1999).

In a study outside of North America, Markwei (2013) found that homeless teenagers in Ghana used mainly interpersonal sources, especially their network of friends in their everyday life information seeking behaviours (p. 303). Markwei's (2013) investigation revealed that the young people she interviewed in Accra "exclusively used interpersonal sources to meet eight of the eleven information needs" (p. 303) she identified over the course of her research. My findings are closely in line with these findings, and those reported in the North American studies mentioned above, which also revealed that individuals preferred to get information from people they know when seeking everyday information.

Meyers et al. (2009), Fisher et al. (2005), and Markwei (2013) reported on a variety of different factors that affected an individual's preference for interpersonal information sources. Some contextual factors affecting this preference found to be present in Laos include the lack of access to electronic sources, perceptions of credibility and trust, and the desire to follow habitual patterns of information seeking. Other than a lack of access to electronic resources, the contextual factors affecting this preference for interpersonal information were related to the social and cultural values of the individual. In the case of access to electronic resources, it was the physical or socio-

economic context that had a strong impact on the information behaviour. The preference for interpersonal information is one feature of information behaviour in Laos that emerged. An understanding of the contextual factors that contributed towards this feature of information behaviour also contributed to an overall contextualised understanding of information behaviour in Laos, as did the contextual factors that affected the other features of information behaviour in Laos, explored below.

7.3.2. Lack of active information seeking

As described in section 4.1.2, some interviewees did not engage in active information seeking. This lack of active information seeking is a behaviour closely related with the concept of “information poverty”, developed by Chatman (1996, 1999, 2000), and put forth a number of “critical concepts” that defined an individual as being information impoverished or rich.

Chatman (2000) describes the theory of information poverty as explaining the “ways in which people define their life experiences in order to survive in a world of extreme distrust” (p. 7). While I do not want to generalise Laos as an environment of “extreme distrust”, some of the theory Chatman developed and the conclusions to which she came are relevant in Laos. The key findings of Chatman’s research identified four key concepts of information poverty; risk-taking, secrecy, deception, and situational relevance (Chatman, 1996, p. 193).

According to Chatman (1996), membership in certain social groups contributes to information poverty by motivating an individual to experience a need for information, but then hindering that individual from seeking information (p. 197). Chatman (1996) found that individuals “engage in self-protective behaviours” (p. 197) to keep other member of their social group from sensing their underlying basic need. According to Chatman, (1996) “these behaviours are meant to hide our true crisis in an effort to appear normal and to exhibit acceptable coping behaviours” (p. 197). Data showed evidence that these types of “self-protective” behaviours were common in Laos. In the example of Laos, Chatman’s concepts of secrecy, deception, risk-taking and relevance appeared to have a strong influence on information behaviour. A number of examples of this type of behaviour are provided in section 6.1.

A lack of active information seeking was an aspect of information behaviour that occurred in several incidents, with different contextual factors affecting the individual's choice not to engage in active information seeking. The majority of the incidents, as described in the example above, were affected by the social context of the individual. Interviewees who reported a lack of active information seeking were motivated by the desire not to appear less competent than their neighbours or colleagues. The woman who did not actively seek information regarding a shop where one could purchase a motorbike on credit, did not want to appear less financially prosperous than her peers. These types of contextual factors often resulted in a lack of active information seeking, similar to Chatman's (1996, 1999, 2000) findings regarding secrecy within communities with a high level of information poverty.

These types of information behaviour exhibited by interviewees and reported in section 6.1 are characteristic of Chatman's "Information Poverty" theory, where individuals refrain from engaging in information-seeking because "they wanted to give an appearance of normalcy", and "they did not want to be viewed as somehow less capable than their neighbours in coping with life-stresses" (Chatman, 2000, p. 6). Rather than ask a friend or colleague for advice on where to buy a motorcycle on credit, the individual spent a great deal of time driving around Vientiane looking for an appropriate shop.

Yu (2010) found that the information practices of the "information poor" was "limited in range and variety, largely performed involuntarily while engaging in non-information practices, mostly confined to home or work places in local areas, sporadically conducted in between non-information activities, involving simple skills and superficial information processing" (p. 18). The interview examples in section 6.3.4 demonstrate these limitations on information activities in Laos, in which participants did not actively seek information. According to Yu, "information practices not only embody but also perpetuate existing information inequality" (p. 18).

Information avoidance is a similar concept to that of a lack of active information seeking, described above. Participants who did not actively seek information also, on occasion, avoided information altogether, as in the case of Nung, who preferred not to get advice from her friends, family, or neighbours regarding her business.

7.3.3. Implicit trust or lack of critical evaluation of information sources

The majority of interviewees reported an implicit trust in their information sources, demonstrating a lack of critical evaluation of information sources from my Western perspective. However, from the participant's perspective, he or she may have had a very good reason for implicitly trusting an information source. For example, if the information came from a relative or family member, it was deemed trustworthy. In addition, if the information came from an individual in a high position or an elder, it was deemed trustworthy. However, less valid reasons for trusting information sources were also reported, such as the interviewee who described how if she behaved honestly and in a trustworthy manner, others would behave the same way towards her. This implicit trust may be related to the Buddhist concept of "karma", in which an individual receives the same energy her or she puts forth into the world. For the interviewee who is truthful and honest with those around her, the people around her will return that truthfulness and honesty. However, it is not clear whether or not this belief applied to non-interpersonal information sources. Interviewees reported trusting non-local Internet resources when it came to finding information about non-local sources, and only in one incident did an interviewee report an inaccurate or unreliable internet resource.

As summarised in section 2.3.4.1, research by Geert Hofstede and Gert Hofstede (2005) and Dorner and Gorman (2011) suggests that Laos is a country with a high power distance, in which the less powerful members of organisations and institutions accept that power is distributed unequally. This acceptance of inequality affects how individuals interact with information, particularly how they form opinions regarding the trustworthiness of information sources. Brugge, Kole, Lu, and Must (2005) found that in an investigation of values amongst Asian and non-Asian Americans "for many Asians questioning authority is seen as disrespectful" (p. 94). In a similar sense, only a small minority of the participants of my research reported questioning the authority or validity of information resources. The primary contextual factor influencing this tendency to respect authority was shown to be the cultural values held by the interviewees.

7.3.4. Respect for tradition influencing information behaviour

Several individuals reported information behaviour that was strongly influenced by a respect for tradition. High regard for traditional values was not unsurprising, as Laos has a long and rich cultural tradition, closely linked to that of its state religion, Buddhism (Holt, 2009). In many non-Western cultures, tradition is respected as a source of knowledge and is regarded as providing insight into contemporary concerns (Geert Hofstede & Gert Hofstede, 2005). Geert Hofstede and Gert Hofstede's (2005) examination of the dimensions of culture in Indonesia led them to conclude that "tradition is a source of wisdom" (p. 267). This finding may resonate in Laos, which may have similar social and cultural values to Indonesia, another Southeast Asian country.

While some interviewees reported respecting tradition, and behaving in a manner dictated by traditional values as shown in section 6.1, the influence of traditional values was not as strong in younger, more Westernised individuals than in others. For example, as described in section 6.1, Bet reported only asking for his parents advice out of obligation, with no intention of using that advice.

Bet: No, I ask my parents because I want to show respect to them, but I don't use their advice.

The above interview excerpt comes from a young man who's language throughout the interview indicated that he perceived himself to be an educated, modern and independent individual who was familiar with Western attitudes and values. This Western orientation was in stark contrast to the traditionally oriented individuals who reported engaging in certain practices or behaviours out a wish to show respect for tradition, or because tradition was important to them. The individuals who reported activities or beliefs based on Lao tradition and cultural heritage tended to be female and older, however, some young female interviewees also indicated they were strongly influenced by traditional values, as did some male interviewees.

7.3.5. Decision making based on incomplete information

One key aspect of understanding an individual's information behaviour is related to understanding the overall efficacy of the sense-making activities. Yu (2010) found a number of factors influenced an individual's information behaviour, and factors such as a limited information resource base had a strong negative correlation to overall information outcomes, which research investigating the digital divide has shown to be related to socio-economic status (Cullen, 2001; Reisdorf, 2011).

Yu (2010) conducted a study based on Chatman's (1996, 1999, 2000) theory and identified the most common ways in which individuals in China experience information poverty. According to Yu (2010), "information poor are perhaps most significantly disadvantaged in their information assets", which Yu defined as "people's accumulated informational outcomes resulting from their information practices" (p. 18). These informational outcomes are based on a number of factors, primarily their access to information, or "information assets" as Yu describes them, and use of society's information resources. Yu (2010) found that individuals who are considered "information poor" have difficulty asserting their rights to access to society's information resources, due to "personal factors (e.g., lack of interest), but more often, it is deprived by factors beyond their control, e.g., lack of economic resources, lack of basic literacy and skills, lack of necessary service infrastructure (e.g., libraries), etc." (p. 18). How these factors play a role in information poverty in Laos is explored in greater detail below.

Assessments of the effectiveness of the information behaviour of the research participants was accomplished through examining individual accounts of sense-making, with particular emphasis on the "outcomes" component of the sense-making journey. Individual accounts of information behaviour were interpreted to assess whether or not the initial information need or "gap" has been resolved or addressed through the information behaviour activities described by the participant. This included verbatim descriptions of positive outcomes, such as "I got the information I needed", or "I felt satisfied, happy and confident", as well as less overt indicators of successful or unsuccessful information behaviour. This would include descriptions of individuals not being able to find information, struggling to resolve their need, or not going about their sense-making activities in an effective manner.

The results of my analysis and interpretation of efficacy in resolving “gaps” in knowledge and how it related to information behaviour in Laos are provided in section 4.1.2.

Assessments regarding the efficacy of information behaviour played a role in the investigation and interpretation of the results presented in the following section. This assessment was accomplished through the examination of interview data for indicators of success or unsuccessful resolution of information needs or gaps. Efficacy of information behaviour has a number of implications, including a relationship between information poverty and socio-economic status, as found Yu (2010). For this reason, efficacy in information behaviour can be a useful way of investigating and differentiating the various components of sense-making and their implications.

Interpretations of the participant’s comments provided a basis from which conclusions could be drawn regarding the overall efficacy of his or her information behaviour. Participants indication they had little trouble resolving their information need, were able address their gap efficiently, or had positive overall informational outcomes could be described as successful examples of sense-making in which efficacy of information behaviour was demonstrated.

On the other hand, less successful examples were often more ambiguous and relied more heavily on interpreting interview data. Accounts of an individual using inefficient, circuitous routes to information sources are one indicator of less effective information behaviour. Another indicator would be a complete lack of resolution of information problem, which was also somewhat ambiguous to ascertain.

As demonstrated in section 4.1.2, the majority of the incidents reported what could be interpreted as positive outcomes, however not all of these positive outcomes were unequivocally achieved efficiently. Of the incidents that were not completely resolved to the satisfaction of the interviewee, four described on-going sense-making and information situations that had yet to be resolved, therefore the outcomes were neither positive nor negative. A further three incidents could be interpreted as having negative outcomes, in which the information need or gap had not been resolved and the sense-making activities to resolve the information gap abandoned.

Certain contextual factors such as culture also play a role in the willingness of participants to describe a complete lack of resolution of the initial gap in knowledge. An individual who describes failing to resolve an information need may also feel he or she has failed "to meet essential requirements placed upon him by virtue of the social position he occupies" (Geert Hofstede & Gert Hofstede, 2005), which they describe as the act of "loosing face". Rather than admit he or she has not met these requirements, interviewees reported ambiguous outcomes that could be interpreted as successful information behaviour.

In addition, the nature of the "gap" itself influenced efficacy in resolution, and reluctance to admit a lack of resolution. For example, individuals would report relatively neutral, simple sense-making activities including related to making a purchase or organising a football team without the constraint of concern regarding how he or she might be perceived if the gap was not resolved. This was not the case for more complex, personal issues such as the success of a family business, which has significant financial or economic implications.

For this reason, interviews were compared against one another to determine overall level of efficacy. Individuals who perceived and articulated their information need in a timely, straightforward manner were compared against those who chose to ignore or not articulate their gap in knowledge. Similar comparisons were made amongst interview data in each component of sense-making, in order to gauge the range of effectiveness of information behaviours reported. These ranged from the most effective sense-making activities in which information needs were perceived and articulated immediately, and then addressed through targeted information seeking and sense-making activities, using effective, efficient resources or bridges, and in which outcomes were generally positive and involved descriptions of the resolution of the initial gap in knowledge. Accounts such as these were then compared to other incidents where the outcomes included descriptions of the gap not necessarily being resolved, or ambiguous descriptions of outcomes indicating a lack of overall effective information behaviour.

Comparing incidents from the interviews against one another permitted me to develop a more comprehensive overview of the relative efficacy of the information behaviour that was described.

Rather than using my own perception of judgements of what would be logical information

behaviour steps in a given sense-making incident from my own understanding, I based my interpretation of how other participants in Laos had addressed similar information needs. This permitted a more contextually relevant understanding of how or why an individual might choose to engage in information behaviour that was less effective than other reports of information behaviour.

Nevertheless, the interpretation of data as I describe above is still reliant upon my understanding of the accounts of information behaviour as describe by participants who come from a culturally different background than myself. However, all effort was made on my part to be aware of the potential for bias in this interpretation and to avoid comparing participant's descriptions of how they engaged with information to my own preferences and methods for engaging in information behaviour.

7.4. Applicability of research methods

Designing a generalisable procedure that will enable researchers to develop contextualised information behaviour models to suit diverse contexts and local conditions was a secondary objective of the research. A procedure to contextualise information behaviour, recounted in Chapter 3, was derived from the research methods in order to address that secondary objective. Therefore, it is worthwhile to evaluate the applicability of the proposed and actual research methods to determine how successful they were in addressing this secondary objective and contributing to a generalisable theory in the field of information studies.

The research method was developed with the intention of examining information behaviour using the critical incident technique, based on Dervin's sense-making metaphor for understanding information behaviour. Dervin's model and its relevance are explained in section 2.2.5.1.

The research methods were primarily composed of three main phases – planning, data collection, and data analysis. Dervin's conceptualisation of information behaviour primarily informed the data collection, though her model was also used as a framework for analysis. In addition, relevant

frameworks such as critical incident technique informed the research methods at the planning, collection, and analysis phases.

The planning stage consisted of reviewing relevant literature in order to develop a clearer understanding of the current research in the field, providing a solid background from which to begin to develop a research methodology. Researchers wishing to conduct similar research with the aim of developing contextual understandings of information behaviour would not have to perform such a comprehensive scan of the scholarly literature; as this has been done as part of the current research project and would be largely applicable to other similar research projects. The researcher should however be prepared to review literature published following the publication of this thesis, and literature specific to the geographic region or cultural group under investigation. This will provide the researcher with the foundation he or she would need to collect rich data. An intimate understanding of the culture under investigation is essential to successful research outcomes, however, as described in section 3.3.4.1, an outsider research can achieve insights not available to researchers enmeshed within their own culture..

During the planning phase Dervin's Sense-making metaphor provided the conceptualisation of information behaviour that informed the development of the research project. An understanding of how individuals make sense of their reality is a critical component of developing a contextualised understanding of information behaviour. Philosophical orientations such as social constructionism, relativism, and interpretivism also play important roles in establishing a conceptual framework from which the researcher can collect data.

Dervin's roster of Sense-making questions served as a starting point for the semi-structured data collection instrument. Convenience and snowballing sampling methods were used as mentioned in section 3.3.1.5, in addition to a purposive criterion which was used to identify *information rich* cases. Data collection progressed as initially proposed other than some minor adjustments to participant recruitment and sampling methods. The most critical insight was recognition of the importance of maintaining at all times a flexible, adaptable and culturally responsive approach to data collection. Cultural sensitivity is of paramount importance in gaining the trust and cooperation of participants. In the case of an outsider researcher, this responsiveness and understanding would

be best achieved through extensive experience and time spent living amongst the community under investigation, as endorsed in ethnographic research methods. The investigation of a community by an insider him or herself has potential benefits, however the outsider researcher has the advantage of a non-member perspective, and some communities may lack educational opportunities permitting the undertaking of advanced research.

Dervin's writings provide ample direction on the use of her methodology to collect data, however instruction in analysis of the resulting data is less comprehensive. Hence, a number of methods for analysing the data were trialled before selecting a method based on Dervin's sense-making metaphor. The components of sense-making (situation, gap, sense-making, bridge, outcomes) provided a suitable framework from which to explore the data. Interviews were examined on a case-by-case basis, and separate information behaviour incidents were given unique identification codes. Each incident was then examined in depth for evidence of the interviewee's *step-takings* through time space. Accounts of information behaviour were transcribed, then systematically examined to develop an understanding of each sense-making journey. Interviewee's accounts provided verbatim evidence of how he or she moved from one component to another. This verbatim evidence was coded and collated using spreadsheets, which resulted in a detailed overview of every incident collected. Phase one analysis consisted of examining the components of sense-making in multiple accounts in order to develop an understanding of general everyday information behaviour activities. Phase two analysis consisted of examining the components of sense-making across a single incident in order to identify the contextual factors using Gee's (2011a, 2011b) discourse analytic method. The results of the two phases of analysis are described in chapters 4 and 5.

Table 20 below illustrates the different constructs used to inform data collection and analysis:

Table 20 – Constructs and research methods

Construct	Research phase	Aspect of research informed by construct
Interpretivism	<ul style="list-style-type: none"> • Planning • Data collection • Analysis 	Philosophical orientation
Relativism	<ul style="list-style-type: none"> • Planning • Data collection • Analysis 	Philosophical orientation
Social constructionism	<ul style="list-style-type: none"> • Planning • Data collection • Analysis 	Theoretical framework
Critical Incident Technique (Flanagan, 1954)	<ul style="list-style-type: none"> • Planning (data collection instrument design) • Data collection • Analysis 	Unit of analysis
Sense-making	<ul style="list-style-type: none"> • Planning • Data collection • Analysis 	Interview roster, Primary analysis framework
Discourse Analysis/Building tasks of language (Gee, 2011a, 2011b)	<ul style="list-style-type: none"> • Analysis 	Additional analysis framework for identifying contextual factors

See section 3.3.1 for an overview of data collection, and section 3.3.2 for more detail on data analysis.

The combination of the various constructs and methodologies described above resulted in a contextualised understanding of information behaviour in Laos. Through the use of similar research methods in different contexts, comparable contextualised understandings of information behaviour could be developed in diverse localities for different cultural groups. The insights gained from my experiences during the planning, data collection, and analysis phases of the my research contributed to the development of a robust research method that fulfils the secondary objective of this research.

7.5. Summary of discussion

In the above sections I have explored how the findings that emerged through data analysis related and contributed to existing theory and literature. In addition, I have examined the suitability of the research methods for investigating information behaviour in diverse local conditions.

The greatest contribution this research has made to the body of library and information science knowledge and theory is with regard to exploring the relevance of existing models of information behaviour in a non-Western, developing context. Some existing Western models of information behaviour have proven to have relevance to certain extent in the Lao context, however certain critical differences in how people need, seek, and use information in a developing country did emerge. These differences include the strong preference for interpersonal information, the tendency to avoid information in certain situations, and the role of tradition in information behaviour, as well as other features described in section 7.3. An awareness of these unique features of information behaviour in Laos is essential when considering how Lao people interact with information. An understanding of these contextual factors and how they affect information behaviour has important implications in a variety of settings, described in the following section.

Chapter 8 **Implications, future research and conclusions**

There are a number of theoretical and practical implications of this research. This research was undertaken with the aim of making a meaningful contribution to professional and theoretical domains of information science. In addition to contributing to existing LIS research, this research has contributed practically to the LIS profession, with possible applications in a variety of settings. This chapter explores these implications.

This research was undertaken with particular emphasis on ensuring the research was valid and reliable, and with an awareness of the issues, limitations, and delimitations that had potential impacts on the research quality. This chapter also explores these considerations.

Potential for future related research is reflected upon, and finally the entire thesis is summarised with a conclusion.

8.1. Implications of the research to library and information science theory and research

The research was motivated by the desire to make an original contribution of the existing body of knowledge and theoretical foundations of library and information science. The potential implications of the findings of the research for information science theory are described below.

8.1.1. Implications for contextually relevant understandings of information behaviour

Information science researchers have been attempting to develop an accurate model of information behaviour for close to 30 years (Wilson, 1999). Currently several widely-cited models exist, each with its own strengths and weaknesses, advocates and critics. As described in the introduction to this thesis, the majority of these models of information behaviour have been developed based on empirical evidence gathered in Western contexts such as the United States or the United Kingdom. This study has explored information behaviour in a non-Western context, and

as discussed in section 7.2.2, found that developing an accurate model of information behaviour that is relevant in diverse contexts may require information science researchers to oversimplify how individuals interact with information. In section 7.2.3 I suggested that the development of a universal model of information behaviour may not be useful as it is likely to be inaccurate in certain contexts. Instead, I suggest a method for in-depth investigation of information behaviour in diverse contexts that has the potential to reveal certain important features or characteristics of information behaviour within the context studied. For this reason, my research contributes to understanding information behaviour from diverse social and cultural perspectives; providing added insight into the relevance and accuracy of existing information behaviour models in diverse locations.

8.1.2. Implications for the investigation of the relationship between quality of life and information behaviour

The potential for contextualised understandings of information behaviour to improve quality of life for individuals in developing countries is of great interest to my research. As described in section 2.2.2.1, an individual's information needs are generally derived from his or her basic needs. Markwei (2013) found that the information needs of the participants in her doctoral research related to their basic needs based on Maslow's hierarchy of needs, as shown in Figure 5 in section 2.2.2.1. Therefore, the contextualised understanding of information behaviour provided in the current research will help individuals in Laos to develop insight into their own information behaviour, and possibly improve the efficacy of their existing information practices. This improved capacity to resolve information needs will then allow individuals to more effectively address their basic needs, permitting them to respond to more advanced needs as depicted in Figure 1 in section 1.2.

Section 2.3.5 explored the concept of quality of life, and how it can be measured. Thus far little research has examined the relationship between information behaviour and quality of life, or the potential for information behaviour research to improve the quality of life for people with ineffective information practices. I would like to investigate the potential for individuals in developing countries to experience higher quality of life as a result of being able to resolve more complex information needs. The relationship between quality of life and information behaviour is

an intended future research direction that relies on the ability to develop contextualised understandings of information behaviour in diverse local conditions, an objective of my research that has been achieved.

8.2. Implications of the research findings to library and information science practice

The research was motivated by several practical incentives where a better understanding of the role of context within information behaviour would benefit practice and practitioners in a number of fields. The potential implications of the findings of the research are described below.

8.2.1. Relevance within international development

As described in section 1.6, the reliance of international aid agencies upon existing information behaviour models in the design of information literacy education development projects for implementation in developing countries was one motivation for undertaking this research. Potential improvement to these types of development projects provided one incentive for the development of contextualised understandings of information behaviour, one objective of my research.

Future development projects might benefit from considering the social and cultural factors affecting how individuals interact with information in non-Western contexts. In the case of Laos, an understanding of the aspects of information behaviour related to information avoidance and the evaluation of information, described in section 7.3, is relevant to the design of information literacy education programmes. These dimensions of information behaviour will also resonate in other non-Western countries with similar social and cultural contexts, and can provide development agencies with greater insight into the development and implementation of more effective and relevant information literacy projects in developing countries.

An in-depth assessment or evaluation of past and current information literacy education initiatives in a given region or developing country, including an investigation of the outcomes of these projects and relevance in non-Western societies would also provide greater insight into the development and implementation of more effective and relevant information literacy projects.

Based on the findings of this research, some preliminary recommendations for information literacy projects in Laos can be provided.

A successful information literacy project in Laos will:

- Take into account the fact that most information in Laos is transmitted orally, though the internet is beginning to rise in popularity as an information source;
- Take into account the counter-intuitive nature of critical evaluation to most Lao people;
- Be the result of a collaborative relationship between the local community and international and/or funding organisations;
- Have specific and measurable outcomes that can be evaluated accurately;
- Reflect the results of previous project evaluations and participants feedback;
- Be relevant to the participants' needs;
- Put information literacy and its usefulness into context for the participants;
- Be culturally responsive and aware of the role that social and cultural contexts play in information behaviour in Laos.

However, as mentioned above, a more thorough evaluation of past and present information literacy projects and their outcomes in Laos needs to be undertaken before truly accurate recommendations can be provided.

8.2.2. Relevance to information systems design

As discussed in section 1.6, the design of information retrieval systems and various information system interfaces is also based upon Western ways of conceptualising information behaviour. While scholars and industry experts have investigated the use of information systems in non-Western contexts, that research has not integrated the understanding of the predominant theories of information behaviour into their research methodologies. An understanding of the contextual factors influencing information needs, seeking, and use as described for the example of Laos reported in Chapters 4 and 5 can provide insight into the design of more relevant and usable information system interfaces for non-Western contexts.

8.2.3. Relevance to library and information science professionals

A strong library and information science education sector is absent in many developing countries, and therefore information professionals in developing countries such as Laos are predominantly educated abroad, in Western educational institutions, in neighbouring countries such as Thailand or Vietnam, or through on-the-job training. A contextualised understanding of information behaviour, as provided in section 7.3, can help these librarians and information professionals better understand how people need seek and use information in their community. Rather than trying to adapt non-local information behaviour theories to their community, a contextually relevant understanding of information behaviour will allow information professionals to design more appropriate and valuable information services, libraries, and educational programs, better suited to meeting the needs of the community.

As described in section xx, individual sense-making activities are unique, and therefore it is difficult to make generalisations that would be relevant to all library & information professionals in Laos. However, a few general recommendations apply to the Lao context. In particular, Lao library & information professionals can benefit from

- Adopting a service model based on traditional concepts of community organisations, rather than trying to emulate Western service models;
- Diversifying their services and the resources they provide to better meet the needs of their communities, as barriers such as the lack of print culture and low number of resources published in the Lao language are a major barrier to the traditional Western concept of “a library” in Laos;
- Understanding the important role social and cultural contexts play in how people need, seek, and use information, providing the insight needed to understand where their resources and services are or are not meeting the needs of their community;
- Undertaking a thorough needs analysis grounded in a culturally aware paradigm, also providing insight into how their services & resources are used or could be better used;
- Having an awareness of the features of Lao information behaviour, namely that:

- Lao people generally prefer interpersonal sources of information
- There may be a lack of active information seeking
- Lao people may have implicit trust or lack of critical evaluation of information sources
- Respect for tradition often influences information behaviour
- Lao people may make decisions based on incomplete information

Librarians and information professionals may be better equipped to help their clients navigate Western information systems to increase the efficacy of their information practices with regards to seeking and using Western information resources more successfully if these recommendations are taken into consideration. However, how each individual library and information professional in Laos responds to these recommendations is for him or her to interpret, and ultimately, make the most appropriate decisions based on his or her unique circumstances and situation.

These preliminary recommendations based on this research project can provide Lao library & information professionals with support to carry out further meaningful exploration of the role of libraries in contemporary Lao society. Furthermore, I intend to further explore possible recommendations based on my findings with the assistance of a Lao colleague who can provide deeper insight into the cultural nuances that might affect any recommendations.

8.3. Assessing the quality of the research

It was important to develop strategies to ensure the validity and reliability of the research process in the early stages of research design. For the purposes of assessing the quality of qualitative research, trustworthiness was the principal criterion used (Bryman, 2008 p. 377). Within trustworthiness are four sub-criteria: credibility, transferability, dependability, and confirmability (Bryman , 2008 p. 377). This thesis provides documentation that the trustworthiness criteria mentioned were adhered to, as described in Table 21 below.

Table 21 – Research assessment criteria

Criteria	Procedures for ensuring criteria are met	Research activities that met the criteria
Credibility	<ul style="list-style-type: none"> Carry out research according to principles of good practice (Bryman, 2008 p. 377) 	The investigation was carried out according to canons of good research practice.
Transferability	<ul style="list-style-type: none"> Provide rich account of dimensions under investigation (Bryman, 2008 p. 378) 	The rich account of the behaviours and contextual factors under investigation throughout the thesis permits researchers to make informed decisions about the transferability of the findings.
Dependability	<ul style="list-style-type: none"> Adopt an “auditing approach” (Bryman, 2008 p. 378) Keep detailed records of all phases of the research (Bryman, 2008 p. 378) 	The accessible and detailed records of participant selection, interviews, and data analysis decisions permits peers to act as auditors for confirmation of research dependability.
Confirmability	<ul style="list-style-type: none"> Avoid predisposition or personal bias (Bryman, 2008 p. 379) 	The research is confirmable as it is apparent that the researcher has not overtly allowed personal values or inclinations to sway the conduct of the research and findings derived from it, and was aware of the potential for personal bias to influence the research throughout the project.

It is important to consider the subjective nature of interview data and the implications of this subjectivity upon the findings, and therefore, the trustworthiness of the research. Experiences, values, behaviours, and understandings were described based on the individual interviewees’ perceptions of these dimensions of his or her context, and in describing them, “he or she applies in his or her talk cultural narratives which in themselves are neither true or false, but simply exist” (p. 755), according to Talja et al. (1999). Talja et al. (1999) go on to suggest “all the accounts people give of their behaviour are constructed on the basis of culturally shared meanings” (p. 755). Therefore, the trustworthiness of the data may be limited by the subjective nature of reality.

However, Talja et al. (1999) also suggest that idealised descriptions of interviewee's behaviours does not jeopardize the reliability or validity of research using the interpretive approach (p. 757). These authors assert that idealised descriptions contribute equally to the understanding of the participant's perception of reality. As previously mentioned, *information practices* is a sociological concept that can only be examined through personally constructed interpretations. For this reason, the integrity of the conclusions was not be compromised by the subjective nature of interview data.

8.4. Considerations and issues

As with any research involving human participants, potential ethical issues were taken into consideration. In addition, consideration for other issues of potential concern informed the undertaking of the research. Two issues that bore the most relevance were the insider/outsider status, and the issue of access, described below.

8.4.1. Ethics

The primary ethical concern that was encountered in the course of the research was the issue of anonymity. The individual interview responses provided considerable data, much of which can only be understood in relation to other comments made by the participants. However, any comments made by interviewees used in the research has been anonymised so that no individual is identifiable. The ethical issues were made clear to the research participants through an information sheet, and informed consent which was obtained from all participants. The School of Information Management's Human Ethics Committee (HEC) approved an application for the research to be conducted, a process which ensured ethical guidelines were strictly adhered to, and any potential ethical concerns were addressed and minimized. Relevant documentation of the ethical approval process, including the participant information sheet, consent form, and interpreter confidentiality agreement are attached in Appendices C and D.

8.4.2. Insider/outsider status

An individual's status as an insider or outsider with regard to knowledge, perception, and reality has implications for information behaviour research. Essentially, as an outsider, a researcher does

not share the same “expected norms”, or “ways to approach the world” (Chatman, 1996, p. 194) as insiders, which presents challenges when trying to understand the *why* and *how* behind behaviours.

Chatman (1996; 1999) describes the insider/outsider theory in relation to information behaviour in several benchmark studies investigating information poverty. She suggested that “only insiders can truly understand the social and information worlds of other insiders” (1996, p. 194). However, according to Chatman (1996, p. 195), outsiders can also claim access to new knowledge, simply as part of their role within the larger society. Chatman stated that “insiders' lived-experiences are shaped by the fact that they share a common cultural, social, religious, etc., perspective” (1996, p. 194). She goes on to suggest that these common experiences provide “expected norms of behaviour and ways to approach the world” (Chatman, 1996, p. 194), as well as defining perceptive priorities for individuals.

In addition, my status as a researcher as an outsider may have elicited what has been described as the “White Coat Syndrome”, in which participants’ responses are altered to suit what they perceive to be my needs. I used a number of strategies to limit the impact of my outsider status. My understanding of the Lao language, familiarity with the culture and local community, as well as my relative youth are factors that helped the participants to feel at ease during the data collection. In addition, the participation of the interpreter was invaluable in reducing the effect of my outsider status. I also followed the advice of ethnographic researchers who suggest integrating into the community under study as much as possible, including adopting the customs and clothing of the locals.

While gaining an insider’s understanding of the social and information worlds of the participants may be impossible for me as an outsider, the outsider researcher benefits from being able to investigate the embedded values and assumptions identified by Cutler (2005, p. 75), and being able to communicate the results of this investigation with the larger research community. For this reason, despite my status as an outsider, any attempt at gaining an insider’s understanding should be valuable, as it contributes to new knowledge accessible to the larger society.

8.4.3. Access and withdrawal

The issue of access was a concern when planning this research. The first concern that was addressed was that of permission from the government of Laos to conduct research. This process began immediately upon completion of the final proposal revisions, and involved providing written documentation of the research methods and data collection instrument to government officials at the National University of Laos. Permission was granted, with the understanding that I did not have authority to ask sensitive questions regarding political issues. Following approval, I began to address the secondary issue of access to individual participants. Several potential participants were identified using my network of personal contacts prior to leaving New Zealand. Access to additional participants was achieved through snowballing and purposive sampling techniques. These participants were accessed through the social network of the interpreter and the social networks of the previously identified participants. The interpreter was also very helpful in facilitating access to participants.

Once contact was made, and data collected, withdrawal did not present a significant challenge. However, to avoid concerns regarding abrupt withdrawal, I offered to provide a summary of the research results to the individual participants once the research has been completed. This procedure ensured the participants were aware of the extremely valuable role they have played in the research, and my gratitude for their generous contribution to the research.

8.5. Limitations

The research was limited by a number of factors that affected the outcomes of the study. However, an awareness of the limitations of the research that informed the development of the research design, including data collection and analysis reduced the impact of these limitations on the overall quality of the study. The most significant limitations, and the steps taken to minimise their effect, are described below.

8.5.1. Language

The language barrier between myself the participants was a significant limitation of this research. As a native English speaker, I was at a disadvantage when communicating with the Lao participants. The use of an interpreter, and my basic understanding of the Lao language, did permit reliable collection of data. To further validate the data collection, a trial interview was audio recorded, and the translation validated by a 3rd-party. The translation was found to be of a high quality standard by a senior official at the National University of Laos. Despite these attempts at compensating for the significant issue of the language barrier, the limitation was nonetheless present.

8.5.2. Cultural bias

Despite my best attempts at neutrality, inherent cultural bias towards Western cognitive patterns may be present. As mentioned in section 2.3.4.2, eliminating this bias would be almost impossible, as all research must take place within a social, cultural, and historical context. However, an awareness of the possible preference for Western cognitive patterns permitted me to quickly recognise and respond to potential issues arising from the researcher's social, cultural and historical context.

8.5.3. Political considerations

The government of Lao PDR adheres to a centralised system of government and leadership. This posed some problems with regard to permission and access to participants, as well as data collection. Before research was able to commence, permission from the Lao government to collect data, and appropriate travel documents had to be obtained.

Some governments may be reluctant to permit research to be conducted that may reflect negatively on the citizens or government of the country. However, the research did not aim to categorize or make judgements based on the data collection, but merely to try to explain how and why people in different contexts interact with information differently. For this reason political or administrative impediments were minimal.

8.5.4. Contextual nature of the research

As noted by Dervin (1997), the study of context presents multiple challenges, as it is neither static nor independent. While the research aimed to explore the influence context, the context of the researcher also may affect the data. The ambiguous nature of context presents additional challenges for the study of context. Courtright (2007) also suggests that independent investigations of contextual factors from an information science perspective may test initial assumptions about contextual boundaries.

Therefore, the study of the relationship between context and information behaviour was not easy, as I was challenged to remain objective, as well as aware of my own implicit assumptions. Courtright (2007) also suggests that the test of initial assumptions may actually stimulate new questions, which may be posed to information actors. Awareness of the challenges of examining contextual factors helped limit the impact of such issues on the research itself.

8.6. Delimitations

Intentional limitations were set during the design phase of the research in order to increase the overall quality of the research. The most significant delimitations, and the reasoning behind their inclusion are described below.

8.6.1. Laos

This study has intentionally limited itself to investigating the role of context in information behaviour in Vientiane, Laos. This delimitation is imposed due to the magnitude of the research objectives, so that they may be manageably addressed.

8.6.2. Contextual "snapshot"

As mentioned in section 2.3, there exist many challenges in attempting to study context. For this reason, despite an understanding of context as dynamic and responsive to human behaviour, for the purposes of the research, context is conceptualized as static at the time of investigation.

In the application of social constructionism in information science research one problem that arose was the understanding the relationship between the individual and society, and whether the former exerts an influence on the latter, or vice versa (Burr, 2003). Logically, the individual precedes society, in which case a bottom-up influence from the individual to society would be the correct way in which to view the relationship. However, a bottom-up influence cannot account for the myriad of orientations, values and practices common to individuals within a societal group. On the other hand, a top-down view, in which society is seen as determining the individuals, would exclude the existence of human agency.

According to Burr (2003), research within the social constructionism framework perceives the relationship between the individual and society as operating in both directions. In Burr's words "human beings continually construct their social world, which then becomes a reality to which the individual must respond (p. 185)". She elaborates further:

Although human beings construct their social world, they cannot construct it in any way they choose. At birth they enter a world already constructed by their predecessors, and this world assumes the status of an objective reality for them and later generations (p. 185).

Indeed, this mutually-informing relationship is a circular process, involving subtle shifts in society that occur over generations, built upon previous constructions. Conceptualising the relationship between the individual and society in such a manner reiterates many of the ideas presented in the literature review, namely the suggestion that individual thinking and reasoning, and hence information behaviour, do not occur in a historical or cultural void. Instead, these behaviours are built upon the historical and social frameworks of the culture into which one is born.

This research did not intend to examine contextual change and is not a longitudinal study. The influence of the individual upon context occurs slowly and is only perceptible over time. On the other hand, evidence for the influence of context on the individual is observable at any point in time. For this reason, contextual factors identified in the data collection and data analysis will be understood to be contextual "snapshots", accurate at the time of investigation.

8.7. Further research

There are two principle areas in which I see further research being carried out that can build upon the findings of this study and the development of the research methods used in this study. These are:

- Contextualised understandings of information behaviour
- Investigation of the relationship between quality of life and information behaviour

This study has elaborated a picture of everyday information behaviour in a non-Western context. The development of this contextualised understanding, and the design of appropriate research methods that can be used systematically to investigate information behaviour in other contexts, provides the necessary starting point from which the development of contextualised understandings of information behaviour in diverse settings is enabled. Once contextualised understandings of information behaviour in numerous diverse social and cultural settings have been developed, it may then be feasible to refine existing information behaviour models with the aim of creating a model that takes contextual variation into account. The further investigation of information behaviour in diverse contexts is the logical next step following the completion of this study.

An understanding of the relationship between quality of life and information behaviour first requires an understanding of the contextual factors affecting information behaviour in a given society or community. The investigation of information behaviour in Laos taking into account the social and cultural factors affecting information behaviour can provided the basis from which in-depth exploration of the relationship between information behaviour and quality of life. This area is one of great personal interest and also of great potential for meaningful impact within less developed societies, where more effective information behaviour may enable individuals to experience greater quality of life. The investigation of quality of life and information behaviour is also a logical continuation of this research and one I hope to embark upon at the earliest opportunity.

8.8. Conclusions

This interpretive research project used qualitative methods to investigate the contextual factors that influenced information behaviour in Laos, and how they influenced information behaviour. It was motivated by the identified lack of understanding of how context affected information behaviour in non-Western societies and developing countries, and the aspiration to design a method for developing contextualised understandings of information behaviour that could be used in diverse local conditions. The research was also motivated by the lack of consideration given to contextual factors such as cultural and social values and how they affected information behaviour in a number of practical settings including international development, information system design, and the development of library services in developing countries. However, the strongest motivation for conducting the research was to form a basis from which further investigation into the relationship between quality of life and information behaviour could be explored.

The study context involved the in-depth exploration of 52 information behaviour incidents collected during interviews with 30 participants in and around Vientiane, Laos, gathered using the critical incident technique. Accounts of the interviewees' information behaviour was captured through the use of Dervin's SMM which also informed the research design and conceptualisation of information behaviour. The research design was also informed by a social constructionist theoretical perspective. I analysed the data from the interviews using a three phase analytical method, beginning with the identification of the information behaviours in the first phase, followed by identification of the contextual factors in the second, and finally revealing how the latter influenced the former through a third phase of analysis. The analytical tools used to examine the data included a framework developed from Dervin's Sense-making metaphor and discourse analysis.

While subject to the usual limitations of interpretive research based within a single national cultural environment, this study helped address the identified gaps in the literature. It has produced a rich contextualised understanding of information behaviour in Laos, which may resonate in other non-Western contexts.

It has also produced the following insights:

- Information behaviour is not culturally neutral
- Information behaviour is influenced by a number of critical primary and secondary contextual factors that act in combination with each other to produce varying information related behaviours
- In-depth exploration using the methodology developed in this thesis can produce contextualised understandings of information behaviour and critical “features” of information behaviour in a given context
- The use of the critical incident technique, Dervin’s SMM, and discourse analysis provide a useful set of research tools for the investigation of context and information behaviour.

In particular, this study has extended existing theory with regard to the role of context in information behaviour. Existing theories and models generally conceptualise context amorphously and ambiguously, without explicitly articulating the influence of contextual factors on information behaviour. This research has confirmed the understandings of the role of context in information behaviour as put forth by Wilson’s (1999) “Model of Information Behaviour” and Dervin’s (2008) “Sense-making metaphor”, both of which provide an accurate broad conceptualisation of the role of context in information behaviour in the case of this research. Furthermore, this research has gone on to further identify and articulate certain contextual factors as having a significant influence on information behaviour in the context of Laos, through the identification of overarching features of information behaviour in Laos. The research methods used to identify these overarching features, and the contextual factors that influenced them, are described in Chapter 3 and are expected to be replicable in diverse local conditions to develop similar contextualised understandings of information behaviour.

In the case of Laos, these features of information behaviour were revealed to be:

- The nearly ubiquitous preference for interpersonal information
- A lack of active information seeking and the avoidance of certain types of information and information sources

- Implicit trust in most interpersonal sources of information, or a lack of critical evaluation of information sources
- Respect for tradition influencing information behaviour
- Decision making based on incomplete information

In summary, this study has aimed to further develop the field of information science by exploring the contextual factors affecting information behaviour in a non-Western, developing country.

These findings, and the development of the research methodology, have the potential to contribute to both theory and practice in a number of significant ways. The findings can be used to improve the relevance of information literacy education and library services in Laos, as well as facilitate the improvement of information systems design for use by Lao people. In addition, these outcomes may resonate in other non-Western contexts. The findings also have the potential to continue to extend existing information behaviour research examining context. Finally, the findings and development of the research methods form a starting point from which investigation of the relationship between quality of life and information behaviour can begin to be explored, an area that could have significant implications for international development. It is this meaningful contribution to knowledge and potential to improve the quality of life for people in developing countries all over the world that motivated the undertaking of this study, a goal that may now be feasible.

Chapter 9 **References**

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Chapter 10 **Appendices**

10.1. Appendix A – Roster of SMM interview questions

SMM Interview Instrument

“Contextualising information behaviour: The example of Laos”

Researcher: Nicole M. Gaston

10 August 2011

Hello and thank you for agreeing to talk with us. My name is Nicole and I am researching about how Lao people use information to solve their problems. I just want to talk to you about a situation when you had a question and you used information to answer your question. This could be any kind of information, including advice from your family or friends, a book, the newspaper, the internet, the television, or radio, or a conversation or discussion with any person. This is just an informal conversation, not a test. There is no right answer or wrong answer. I just want to learn about the kinds of information Lao people need, how they access information or search for information, and then, how they use the information they find.

Demographic information

Age:

Sex: Male/Female

Status: Married/Single

Profession:

Describe your interests outside work, hobbies, etc.:

What is your typical day like?:

Can you tell me a little about your hometown, your family, and educational background? For example, where did you grow up? What do your parents do? How many brothers and sisters do you have? What kind of schools did you go to?

Please take a few moments to think about a situation in the past when you had a question, or felt confused, and used information to answer your question or solve your problem.

Some examples include getting information from friends or family on starting a business, looking in the newspaper for job advertisements, searching on the internet for information about travelling to a different country, talking to somebody at a school or university about scholarship opportunities, asking your friends or family for advice about buying a laptop or motorbike, etc. It can be any situation in the past when you have used information to answer a question you had. The only important thing is that you needed information to answer your question, and you tried to search for information and then use it to answer your question.

Please don't feel shy, just say whatever is on your mind. There are no right or wrong answers, and anything you tell me will be interesting for me!

This interview will take about 1 hour.

Semi-structured interview – questions and probes

Please think about a situation in the past when you used information to address a problem or question you had.

To tap situations

What was your situation? (Describe briefly)

What happened?

What stood in the way?

What were you trying to deal with?

How did that connect with past events?

How did it connect to forces of power in family, community, society?

To tap gaps

What were your big questions?

Did you have any questions in mind? What are they?

What is the objective of addressing that problem or question?

What were you trying to unconfuse, figure out, learn about?

What did you struggle with?

To tap bridges:

How do you try find the answer to these questions? Any help?

What conclusions/ideas/ did you come to?

What emotions/feelings did you come to? .

What led you to that conclusion/idea/emotion/feeling?

Why do you choose to use this way to get the answer?

To tap outcomes sought and/or obtained

Did you finally get an answer to your questions? Does it help? How? [outcomes/help]

How do you handle/deal with these useful answers? [outcomes]

How did that [name that] help? Facilitate? [and, how did that help? And, how did that help?]

How did that [name that] hinder? [and, how did that hinder? And, bow did that hinder?]

If you could wave a magic wand, what would have helped?

To dig deeper into gaps and struggles

Did you have any difficulties to get the answer? What are they? [outcomes]

What was missing?

How did that stand in the way?

And, how did that prevent you getting more help?

If you finally cannot get an answer to your question? What can't it help? [outcomes/hurts]

To dig deeper into what led to an evaluation

How did you decide that the information you found was helpful (or not helpful)

What led you to that assessment?

How did that evaluation connect with your situation?

What was limited or incomplete about that?

To dig deeper into how things help

And, how did that help?

What did that allow you to do/achieve/think?

Are there ways that you can get the answer, but you chose not to use them?

(Dervin, 2008, p. 19)

10.1. Appendix B – Contextual factors by incident

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
	P= Profes sional R= Recrea tional E= Educat ional C= Consu mer		How is this piece of language being used to make certain things significant or not and in what ways? (Gee, 2011a)	What practice (activity) or practices (activities) is this piece of language being used to enact (i.e., get others to recognize as going on)?	What identity or identities is this piece of language being used to enact? What identity or identities is this piece of language attributing to others and how does this help the speaker or writer enact his or her own identity?	What sort of relationship or relationships is this piece of language seeking to enact with others (present or not)?	What perspective on social goods is this piece of language communicating (i.e., what is being communicated as to what is taken to be "normal," "good," "correct," "proper," "appropriate," "valuable," "the ways things are," "the way things ought to be," "high status or low status," "like me or not like me," and so forth)?	How does this piece of language connect or disconnect things; how does it make one thing relevant or irrelevant to another?	How does this piece of language privilege or disprivilege specific sign systems (e.g., Spanish vs. English, technical language vs. everyday language, words vs. images, etc.) or different ways of knowing and believing or claims to knowledge and belief (e.g., science vs. the Humanities, science vs. "common sense,")?		
1.1	P	Opening a business	Financial matters are made to seem insignificant		Self identifies as more knowledgeable than others				Her own knowledge is more valuable than others	Information avoidance, jealousy	Perhaps interviewee hiding information behaviour in an attempt to appear more successful?
2.1	P	Looking for information about going to university	Incomplete interview – not analysed.								
3.1	R	Making a decision regarding her relationship with her boyfriend	Incomplete interview – not analysed.								
4.1	P	Job seeking		Reading the newspaper for job seeking, reading signs and posters in internet cafés, getting advice from friends				Fortune teller and good luck are connected	Recently developed preference for internet resources, English resources "stronger".	Superstition, emerging role of technology	Traditional values at odds with Western values, Behaviours and attitudes in transition

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation	Incident no.
5.1	E	Preparing for ESL training overseas		Lack of credit card hindered info seeking	Shopkeeper - uninformed; just want to sell a product, not knowledgeable.	Deference to work superior	Wants to support the "new policy of the party".; access to books and resources is not difficult for those who know where to look	Further education and higher salary are connected		Desire for career advancement, emerging role of internet access	Values achievement and success, patriotism	
6.1	C	Buying a laptop	Making an informed decision is important	Making a purchase on behalf of his father	Self identifies as responsible, knowledgeable, role within the family	Mutual trust within family, trust in interpersonal networks	Government newspaper is trustworthy because it is popular and used in the past			Use of interpersonal network in information seeking, implicit trust in information sources	Interpersonal networks are valued, integrates local and non-local knowledge successfully	
7.1	P	Job seeking		Using interpersonal networks for information seeking	She identifies as uncertain, deferential, identity is strongly influenced by others. Others are identified as more knowledgeable	Deference to father, other family and friends		The government and popularity are connected to trust		Trust in popular or government information, values opinions or approval of the community in trusting people or information	Language suggesting deference and malleability permeate interview, a reflection of her sex an age?	
8.1	C	Buying a car	Demonstrating knowledge and wealth is important		Wealthy, elite, urbane	Indicates confidence, superiority	Ask for parents' advice because it is "the right thing to do", not because it is valuable or they are knowledgeable		Values information from the internet over salesperson's knowledge	Language demonstrates knowledge and membership in privileged class, use of technology, disassociation with traditional beliefs and values	Career as "brand-executive", lack of regard for traditional values, very Westernised behaviour, yet status is still important.	
9.1	C	Buying a car	Status is important	Compares herself to her peers	Identifies as someone who worked hard to achieve education, status, etc.	Important to be respected by peers and family, apparent equality with husband	Strongly traditional values	Connects owning a car and being respected in her community	Trusts knowledge from interpersonal sources above internet, newspapers etc.	Family orientated, very important to use wealth to demonstrate status, respects traditional values.	Traditional values, family orientated, status important, reflective of age/experience as student in Russia/communist party member? (This was not explicit)	

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
10.1	P	Changing jobs	Financial matters are made to seem insignificant		Identifies as independent, decision-maker			Connects Chinese people with an unpleasant work environment	Values internal knowledge over other information	Decision-making based on independent thought processes, internal values.	Single woman - related to decision making process, lack of external information?
11.1	C	Buying a motorbike		Managing a business successfully	Identifies as head of household, decision-maker	Slight superiority within the family, as decision maker etc.				Decisiveness and authority in decision making, financial matters, household and business concerns	Role as head of household influenced IB
12.1	C	Buying a laptop			Identifies as an information seeker, aware of censorship & bias, educated and intelligent		Normalises censorship; media bias. "Before I used to think oh Lao TV should report everything, but now I understand"		Values accurate internet resources and interpersonal networks above other forms of knowledge	Language demonstrates thoughtfulness, awareness of varying degrees of accuracy within information resources.	Young man comfortable speaking about Thai politics, but intentionally vague when speaking about Lao censorship and govt media control, perhaps not entirely comfortable
13.1	R	Getting news	Censorship and lack of consistency and quality of news media is significant.	Being a "member of a family", keeping up to date with sport news	Identity recently transitioned from single male to husband & father, identifies as "member of family" now.	Provider for his wife and child - they are dependent upon him, their family is independent	Disagrees with many aspects of Lao government policies, including censorship and consistency and quality of news media	Government control of news media and lack of quality and transparency are connected		Unusual awareness of govt corruption, censorship, disagreement with govt policies., but positive about the future and patriotic	Dissatisfaction w/ govt, preference for working with NPA, indicative of his non-privileged background? Patriotism in that he wants to contribute to Lao society, but has to do so from the outside as he has no connections and sees govt as corrupt

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
13.2	R	Playing sports	Keeping up to date is important, following sport news, having a wide area of knowledge	Organising football matches	Teammate, participant, organiser as needed		Social sport with workmates, enjoys working for a non-profit, non-government organisation			IB a function of role, uses interpersonal networks	
13.3	C	Buying a laptop	Making sure information is trustworthy is important	Using the internet, talking to people	Eldest son, responsible,	Looks after his younger siblings, responsible for buying laptop for use by himself and 3 younger siblings		Connects evaluating information sources with accuracy and reliability		Importance of evaluating sources, awareness of disadvantages of both interpersonal sources of info and the internet	Demonstrates understanding and thoughtfulness when engaging in IB
14.1	R	Architecture interest	Emphasizes she was the only female to enter the competition	Entering a competition, engaging in a hobby, seeking information from a wide variety of resources	Prize-winner, Student, independent, hard-working, modern, young woman				"English ones, it's quite expensive, so we prefer Thai"	Desire to be informed, active information seeking, independence affected incident	Overall behaviours are very Westernised, independence and pride in being female and capable, informed, etc. but also patriotic - wants to contribute to Lao society
14.2	R	Design interest		Engaging in a hobby, seeking information from a wide variety of resources	Student, independent, hard-working, modern, young woman	Student/learner and more knowledgeable teacher				Desire to be informed, active information seeking, independence affected incident	Overall behaviours are very Westernised, independence and pride in being female and capable, informed, etc. but also patriotic - wants to contribute to Lao society

Incident	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
14.3	R	Photography interest		Engaging in a hobby, seeking information from a wide variety of resources	Amateur, interested, modern, young woman					Desire to be informed, active information seeking, independence affected incident	Overall behaviours are very Westernised, independence and pride in being female and capable, informed, etc. but also patriotic - wants to contribute to Lao society
14.4	R	Travelling to China	Language and cultural differences between Laos & China are significant, "I love travelling"	Travelling to a foreign country, seeking information from a wide variety of resources	Traveller, independent, connected, modern, young woman, patriot/representative of Laos, foreigner (in China)	Deferential relationship with friend (celebrity)	Needing to know someone within the ministry to get permission to go to China			Desire to travel, having a connection within the Ministry ("Who you know.."), use of large info resource base affected incident.	Overall behaviours are very Westernised, independence and pride in being female and capable, informed, etc. but also patriotic - wants to contribute to Lao society
15.1	R	Interest in Western music	Engaged, living with fiancée, but not married is significant because very unusual for Laos, "Western style!"	Previous practices involved going to the shop and selecting items based on artist, cover design, etc.; now info seeking involves use of internet and downloading	Westernised, youthful, informed, cool	Respects musical tastes of older man, "my advisor", the older person is more knowledgeable, "influenced by", distanced from his father who disapproved of his relationship	His family disagrees with his relationship because his fiancée is a member of one of the ethnic minority groups		Values foreign music over local	Westernised perspective, relationship and interest in non-local music, influence of other colleague, Western culture, behaviours transitioning due to adoption of the internet, independence is important	Overall behaviour influenced by Western values - music introduced by a Thai colleague. Perpetuating idea that Thai people are more developed, advanced? Relationship influenced by Western values - going against his parents' wishes is very unusual
15.2	R	Video games interest	"I love only football games"	Engaging in a hobby, playing video games with friends, discussing video games and going to video game shops	Youthful, Westernised, cool, informed					Westernised perspective, interest in technology	Overall behaviours influenced by Western culture

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
15.3	P	Job seeking		Job seeking, using the newspaper to look for job postings, applying for a job	Inexperienced, tentative	Less knowledgeable than friend who advised him, deferential to others with more experience, including friends and family, parents support his choice to explore, does not relate to Korean people, who he sees as being culturally different to Lao people	Uncertain whether private or public sector is better, understanding of the differences between working for the government or working in the private sector	Connects private sector with earning potential, connects public sector with opportunities		Transition from someone inexperienced and unknowledgeable to someone with work experience and insight	
16.1	R	News interest		Watching news programmes in English, seeing what's happening in the world, reading about crime news on the internet, discussing news with friends	Aware of censorship, informed, educated, interested	Feels comfortable asking questions of friends or family, but if they don't know, she doesn't feel comfortable going to someone "higher", "And when I see a high person, not only me, all people, have to be something like formal, polite, like respect them"	Lao people are also aware that the news is censored, but "it's ok. For our country situation now".	Age and education are connected to status, or position within a hierarchy. You can be older, but a lower position within the hierarchy if you are not educated.	Believes that if the news makes a false report, she can get the truth from her friends or family. Values interpersonal information over government sources.	Interviewee is very sensitive to status and hierarchy, aware of censorship, and strongly prefers interpersonal information sources	Mother and wife, with husband and father engaged in military service...
16.2	E	Applying for a scholarship	First person accepted to scholarship amongst her group	Previously just wanted to work and earn money, now studying to "upgrade" her skills and knowledge, to benefit her students	Teacher, mother, wife, student, friend, less knowledgeable than some friends	Close interpersonal networks with her family and friends, who she relies on for information, "really trusts" her friend, who she relies on for information		Connects her early notification of admittance with her extensive work experience	Preferred source of information is friends, over other sources	Strong preference for interpersonal sources of information	Relies on interpersonal information sources to supplement official channels, why?
17.1	R	House construction		Building a house, getting advice from neighbours, cleaning, cutting, working, studying	Older sister, responsible for house on behalf of parents		It's normal to hire a private installer to connect house to water supply, normalisation of govt corruption	Connects trust with experience, price and quality, evaluates information		Use of interpersonal networks for info seeking, her community approves of use of non-official services, normalisation of corruption	Values interpersonal info for local issue, not for health related.

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
17.2	H	Health concern		Checking information from shops, discussing with friends, seeking advice from clinic staff, reading the internet	Independent, professional woman	Interpersonal relationships with friends in the office, neither more or less knowledgeable	Socially defined concept of beauty - "black marks" on skin are considered unattractive	Connects popularity in Europe with quality, connects white coat with "doctor"	Values information from internet and professionals over inter-personal network	Values what she perceives are more informed information, rather than info from interpersonal networks	Values non-interpersonal inform for health related info
18.1	R	Playing football		Organising matches, practising, discussing with teachers & teammates	Captain, teammate, student	Invited to play by teacher, gets instruction from father, communicates with team	Businesses want to earn money, might not always be truthful	Connects teamwork and success - "Everything we can do everything, if we believe together"		Collaboration is important, being advised from more knowledgeable people, communicating and collaborating with equals (teammates)	
18.2	P	Post-secondary school studies		Making life decision, choosing a field to study, following father's advice	A son, young, inexperienced, his father he identifies and knowledgeable and wise, older	Defers to his father, "Because he older, he know that everything, is good or not good. So I am young I don't know anything."		Connects youth and lack of knowledge, age and wisdom	Values information from family, friends other non-interpersonal sources, "Because about family advice, everything is true because we are family."	Family is paramount, values age and wisdom	Studies law even though he is not happy because his older, wiser family member told him he should, why?
19.1	H	Fitness/weight loss interest	Not being slim is significant	Trying to lose weight, exercising, getting advice about health & fitness		Trainee, taking advice of trainer, strained relationship with friends	Women are always dieting, women want to slim, it's part of life as a woman to be on a diet	Connects fitness and hunger, eating and being overweight	Expert professional information is more valuable than other information sources	Pressure to be slim - frustration at lack of success	Social and cultural expectations affected behaviours
19.2	C	Buying a car	Getting her first car was very exciting, made her very happy		Parents are buying the car, but she is in charge of selecting it	Intermediary between parents (with \$) and salesman	Parents should buy a car for their child if they can - "Every family buy a car for their children a lot", car is a status symbol			Importance of car ownership for status, and role of family in decision making	Not yet financially independent, but wants status that comes with having a car
20.1	R	Guitar interest	Playing guitar is very important in his life	Learning to play, practising, enjoying music	Initially a learner, now advanced, experienced in guitar, confident	Defers to his teacher, and older brother who are more knowledgeable, does not defer to his mother who is against his playing guitar	Mother didn't want him to learn at first, she thought it was a waste of time	Connects a "sixth sense" with playing the guitar		Mother does not want him to learn to play, but he does anyway	

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
20.2	R	Current events interest		Searching the internet, using the internet to study, using the internet to watch YouTube, listen to music	student			Connects the internet with information about economics, homework	Values internet over other resources	The internet is more convenient for homework topics	
20.3	P	Job seeking	Professional appearance is important	Watching TV, reading the news paper, applying for a job, asking for advice	Job seeker, inexperienced, unknowledgeable, but independent - "I decide my life."	Defers to teacher for advice on CV, application	Almost indifferent about not being offered the job - "Just ok? Normal."	Connects TV ad with professionalism, teacher with knowledge, connects going to the temple and asking for a blessing with personal motivation, connects motivation and getting a job	Values information from teacher - "Of course I trust, he is teacher"	Trust in teacher's advice, importance of professional appearing job advert	
21.1	R	Reading interest	Having an iPad is significant - accessing e-books, "wow, I can read more and more."	Reading, buying books, borrowing books from friends, increasing knowledge	Identifies and intellectual, professional athlete	Relationship with a foreign friend - defers to him but also equal in some ways	Reading is not normal - "some of my friends they have the same interests, but mostly they don't advise me to read the book, the advise me to do something else."	Connects reading and knowledge, desire to experience new things with foreign people	Values the advice and information from his foreign friend, more than local interpersonal network information	Interest in Western values, affected behaviour	
21.2	E	Post-secondary studies	Being awarded scholarship to study in USA is significant	Applying for a scholarship, wanting to travel, get new experiences, discussing with family, friends, teachers	Brother - See's his "role" as encouraging his sister to also study hard and be successful, role model	Family encouraged him, foreign friend advised him, classmates discuss with him	Not being accepted for a scholarship is normal	Connects Western system and "openness" to information, government schools to having "their own ideas", connects "destiny" to success, but also connects hard work to success	Is not convinced that fortune teller's information is reliable, even though one correctly predicted his scholarship	Identification as role model affected his behaviours, interest in Western culture also influenced his behaviour	
22.1	R	News interest	Had a firsthand experience seeing a person killed by an elephant; and then later saw the story misreported on the news, therefore does not trust news implicitly	Watching TV, learning about animal conservation	Someone with first-hand experience, interested in animal conservation, busy		It's normal for people to lie to protect their business, or for news to not be entirely trustworthy			Previous first-hand experience significantly influenced how he evaluated information sources	

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
22.2	P	Job seeking	Happy to find a job, confident	Checking the newspaper, searching the internet for possible work	Capable, willing to work, experienced in hotel work	Deferential to boss	Normally he would find a job by looking in the newspaper; it's unusual to try to use the internet and he feels lucky to have found a job that way	Connects foreigners and a pleasant working environment, connects ;luck and having an opportunity to work	Trusts information from the internet over newspapers etc.	Access to internet and ability to use it was a key factor in successful job-seeking	
23.1	H	Coping with stress	Life is important, time is important, donating your time is important, maintaining traditional values and respecting your ancestors and religion are very important	feeling stressed, meditating, feeling a change, attitude changing	Mother, caregiver, provider, employed, stressed, busy, overwhelmed	Caring for her children, learning from her friend, loving her family, misses her deceased grandmother and feels bad about not being able to pay respect to her while she was living overseas	Difficult for people of her generation to use the internet, in Laos they don't have a nursing home, the oldest daughter is responsible for learning to cook and help the family,	Connects meditation and improved health, lack of need for medicine, connects women and comfort, "it's easier to talk to a woman", Connects the ability to go to the temple with feeling closer to her deceased relatives, connects USA with cold	Values Lao culture and knowledge over Western ideas, sees traditional values as being forgotten, which she sees as unfortunate	Appreciation and respect for Lao culture and traditions affected her behaviour, as well as economic factors	
23.2	R	News interest	Doesn't like Thai news	Watching TV, updating her knowledge	Identifies as Lao person, but with extensive experience in Western country, knowledgeable about America	Gets news from family and friends,	It's normal that information becomes inaccurate as it is transferred from one person to another, Laos is in the process of changing, "it's very different"	Connects a dislikes of Thai news with people screaming or behaving angrily, "out of control"	Equally trusts/distrusts news from official sources and news from interpersonal networks	Previously described preferences for respect affect her feelings regarding news	
23.3	C	Buying a computer for her children	Helping her children to be successful, having more opportunities than her, supporting them is very important	Helping her children, looking on the internet, buying them computers to help them in school	Mother, caregiver, supportive, provider, earner - "My money, I want to be in the project"	Wants to support her children but wants to be in charge of the decision making	Normal for families to discuss and make decisions together regarding finance, but not uncommon for women to have decision making power in financial matters	Connects salespeople in the shop with wanting to sell products, not necessarily being honest and claiming "every computer is good"	Values knowledge from interpersonal sources over other sources for consumer purchases	Family values and awareness of sales tactics affect her info behaviour	
24.1	R	Current events & history interest	Really enjoys reading articles from the internet	Reading, looking at the internet books, magazines, sharing with friends, learning, reading the newspaper	Educated, independent	Mutually informing friends, patron of book salesperson	gives "normal advice" about interesting articles	Accuracy and trust in information sources are connected	Does not trust information if it's not from a reliable source, prefers to check information (from books, internet etc.) with "people who know", values "international news"	Curiosity and interest in learning motive him to seek out new information, inclusion in social community that also shares interests/news.	Single male, independent, info seeking for personal interest

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
24.2	C	Buying a laptop	Making an informed decision is important	Getting advice from his friend who is an IT technician, checking the internet, researching computers, checking shops, talking with salespeople, reading brochures, verifying components of computer	Purchaser, less knowledgeable than his friend, concerned he might make a bad decision, "I didn't know anything"	Defers to friend who is more knowledgeable, suspicious of salesperson regarding specs for computer	In Laos it's normal for shops to sell a computer as "new" but have 2nd hand parts inside	praying and visiting the temple is connected to being happy, making an informed purchase is connected with success and happiness	Values both electronic information and interpersonal info from people with experience equally depending on the situation, but would go to internet first, as it is more convenient, trusts internet information related to technology, but not politics	Self-identification as inexperienced and lack of subject-specific knowledge influenced his info seeking behaviour, reliance upon other people for advice	Independent male, must make a decision using available resources
25.1	P	Weaving interest		Making cloth with silk, learning by watching her mother or relatives	Weaver, poor, contributor to income generation	Learned from her mother, wanted to help her family, learned from her relatives	Her grandmother and mother did weaving; it was expected that she also learn	Learning to weave and contributing to the family, earning income is connected	Knowledge passed down by word of mouth; no resources were available	Lack of resources, could only learn from mother/family, no books etc. Interest in contributing to family income	Female from a poor family, expected to contribute to income somehow, responsibility, expected by her family
25.2	H	Health concern	"Very serious illness"	Going to the doctor, trying to get treatment, praying, not being able to get information	Mother, caregiver, concerned, powerless	Responsible for looking after her daughter	Lack of access to resources and health care in rural areas is not unusual	Connects sins in past life with daughter's medical condition, connects fright during pregnancy with daughter's condition		Feeling of powerlessness, religious belief, lack of access affected info behaviour	
26.1	R	Music & film interest		Looming at magazines, watching TV, discussing with her friends, going to the morning market to buy DVDs/Cds, Initially described enjoying reading and going to the library, but really had only gone to a library once.	Young, cool, wants to appear intellectual	Equal with her friends, desire to fit in with her peer group	Views the library and reading as valuable activities. Believes that reading is an activity that older people (such as the interviewer, her family, etc.) believe is good.	Connects reading with being a valuable activity	She likes Western films better, but they are only available with Thai subtitles or dubbed in Thai, as she cannot understand English	Desire to fit in with peer group affected info behaviour, perhaps embarrassed by her lack of intellectual activities	Typical behaviour of a teenager concerned with peer acceptance, but also wants to appear as intellectual

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
26.2	E	Post-secondary school studies	She wants to study at university	Enrolling in a preparatory class, discussing with family & friends, preparing for university	Learner, young, inexperienced	Gets direction from aunt, trusts the advice of her teacher, defers to her friends	Wants to enrol in university for herself and her family	Connects lazy teachers and not learning		Defers decision making to other around her, engages in activities to please others, uncertain of what she wants	Typical behaviour of a young female, concerned with pleasing those around her.
27.1	R	Music interest		Listening to the radio, buying DVDs	Young, cool, independent	Doesn't like to ask shopkeeper for advice		Finding out new things on her own is connected with good taste		Strong desire to be independent, discover new things independently, influenced her info behaviour	Unusually strong preference for uniqueness; autonomy in music and film choice. Possibly related to strong desire to leave family home and get a career.
27.2	P	Leaving her family home to live independently/ get a career	Her dream from when she was a child was to be a hairdresser	Leaving her family home, applying to study hairdressing, discussing with her family, planning, getting experience	Young, independent, not satisfied with her situation, wanting more	Wants to be independent of her family	People who can afford to pay for the course should, but if you're poor you get support from Japan to study for free	Connects luck with happiness and success, 50% luck, 50% hard work		Strong desire to be independent, achieve her own personal goals against the wishes of her family influenced her info behaviour	Unusually strong preference for independence
28.1	H	Health concern	She can't see anything	Just waiting, accepting her blindness, getting advice from family and friends, going to a clinic, going to the temple and praying for her eyesight to improve	Dependent upon her husband, blind	Relies on her husband, is supported by him		Sins in her past lives are connected with her present illness	Values information from her family members, trusts it "100%" because it's from her family member	Dependency and powerlessness, financial resources affected her behaviour, lack of active info seeking, info poverty	Older female, lack of active info seeking, related to information poverty
28.2	P	Opening a business		Opening a shop, going for a drive, finding a fridge and a box, ordering products, discussing with customers	Independent, earning income, useful	Supported by her husband, advised by the customers, neighbours did not support her	It's normal for neighbours to be jealous and not support her			Lack of active info seeking, info poverty	Older female, lack of active info seeking, related to information poverty

Incident no.	Cluster	Incident description	Significance	Practices (Activities)	Identities	Relationships	Politics	Connections	Sign Systems and Knowledge	Overarching contextual factors	Interpretation
29.1	P	Managing a microfinance group	Helping her community help themselves, Supporting people so they can have money to go to the hospital is important	Observing, finding information, attending training, working with her community, supporting her community	Teacher, mother, community leader, respected, intelligent	In charge of her community's organisation, respected by her community	Her group doesn't have any problems with gossip or jealousy, people are serious about doing a good job, if they cause trouble they are asked to leave	Doing accounting and organising savings for her community is connected to helping, learning and independence are connected to pride, connects talking about censorship and discomfort		Interest in supporting her community motivated her to engage in info behaviour, fear of political implications prevented open discussion	Didn't feel comfortable talking about censorship & govt control of media, related to age and experience, position as govt employee?
29.2	E	Post-secondary studies for her daughter	It's not significant that there is corruption within the university	Making decisions, filling in paperwork, asking for favours, getting approval	Mother, govt employee	Expects special consideration from boss, wants her daughter to go to university	It's normal for a boss to help his or her employee. To show favouritism to subordinates	Her daughter's success is connected to education; studying at a higher level than her mother	University is better than college	Use of interpersonal networks, desire for her daughter to be more successful affected her IB	Desire to see her daughter have more opportunity, and ability to request special favour as govt employee not unusual
30.1	R	Current events interest	Money is significant...products advertised on TV are too expensive	Buying magazines, watching tv, discussing with her sister and husband, going to the shops, following certain actors	Business owner, up to date, aware	Trusts news from her sister, gets advice from her husband	Doesn't feel comfortable talking about censorship	Crime news is connected to safety	Trusts information from the Lao government, trusts information from TV, likes Korean TV, doesn't like Thai TV	Family influenced info behaviour. Fear of political implications prevented open discussion of media & censorship.	Didn't feel comfortable talking about censorship & govt control of media, related to age and experience
30.2	C	Buying a motorbike	Only one shop in Vientiane where you can buy motorbike on credit	Driving around, looking for a motorbike, getting information, discussing with the shopkeeper, worries that she might not be able to make the monthly payments	Boss of the family, mother, earner, decision-maker	Supports her children, her husband has a 2nd wife and family that is poor	It's normal to just go around and check when you want to buy something, not ask for information	Thai products are higher quality, "between Chinese and Thai bike, Thai is better"		Lack of active info seeking, financial resources affected IB	Unusual from a Western perspective but normal for Lao circumstances to seek information in this way?

10.2. Appendix C - Participant information sheet & consent form



VICTORIA UNIVERSITY OF WELLINGTON

CONSENT TO PARTICIPATION IN RESEARCH

Title of project: Contextualizing information behaviour: The example of Laos

- I have been given and have understood an explanation of this research project.
- I have had an opportunity to ask questions and have them answered to my satisfaction.
- I understand that I may withdraw from this project at any point before the start of the analysis of interview data, October 1st, 2011.
- I understand that any information I provide will be kept confidential to the researcher, supervisors, and interpreter, and the published results will not use my name, and that no opinions will be attributed to me in any way that will identify me.
- I understand that the audio recording, notes, and transcripts of interviews will be destroyed 2 years after the conclusion of the research, in March 2015.
- I understand that the data I provide will be used only for the purposes mentioned in the information sheet and will not be released to others without my written consent.
- I agree to take part in this research.

Signed: _____ Date: _____

Name of participant:

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Participant Information Sheet for “Contextualising information behaviour: The example of Laos”

Researcher: Nicole M. Gaston, School of Information Management, Victoria University of Wellington

Dear participant,

Sabaidee! I am a PhD student in Information Studies at Victoria University of Wellington. I am writing a thesis based on research into how individuals in Laos interact with information.

Your participation in this interview will be extremely valuable in helping me successfully conduct my research. As a participant I will ask you to respond to questions regarding how you use information in your everyday life. This is an informal discussion, where you should feel comfortable freely expressing your thoughts and opinions.

An interpreter who has signed a confidentiality agreement will be present during the interview. I will take notes during our interview, and make a digital audio recording. The audio recording, notes, and any transcriptions will be destroyed 2 years after the conclusion of the research. If you do participate, please note that you may withdraw from the research project any time until 1 October, 2011.

The feedback and responses I receive from you will be the basis of my PhD thesis. A description of our interview, and certain words or phrases spoken, may be included in the final thesis, however you will never be identified personally in the written document or any references to the research. All material collected will be kept confidential. No other person, besides myself and my supervisors, Dr. Dan Dorner and Dr. David Johnstone, will have access to the notes or audio recording. The final thesis will be submitted to the School of Information Management, and deposited in the University Library. This research may also result in conference presentations, the submission of articles to scholarly journals, or conference proceedings. The names of any participants in the research will not be used in any reports resulting from this research. If you like, I will provide a summary of the research

findings to you after the data has been analysed.

If you have any questions or would like to receive further information about the project, please contact me at Nicole.gaston@vuw.ac.nz, or my supervisors, Dr. Daniel Dorner (dan.dorner@vuw.ac.nz) or Dr. David Johnstone (david.johnstone@vuw.ac.nz) , at the School of Information Management, Victoria University, PO Box 600, Wellington, Phone (+64) (0)4 463-5103.

Kop chai lai lai!

Nicole M. Gaston

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10.3. Appendix D - Interpreter confidentiality agreement



Contextualising information behaviour: The example of Laos
Researcher: Nicole M. Gaston
School of Information Management
Victoria University of Wellington

I have read and retained the Letter of Information concerning the research "Contextualising information behaviour: The example of Laos" being conducted by Nicole Gaston. In my role as interpreter for the researcher, I understand the nature of the study and requirements for confidentiality. I have had all of my questions concerning the nature of the study and my role as interpreter answered to my satisfaction.

A. Maintaining Confidentiality

I agree not to reveal in any way to any person other than the researcher any data gathered for the study by means of my services as interpreter.

B. Acknowledgement of My Services as Interpreter

I understand that the researcher will acknowledge the use of my services in any reporting on the research. I have indicated below whether I wish that acknowledgement to be anonymous or whether it may recognize me by name.

I do not wish my name to be associated with the acknowledgement of the use of an interpreter in data gathering for the research.

OR

I agree that the researcher may associate my name with the acknowledgement of the use of an interpreter in data gathering for the research.

C. Identification and Signature Indicating Agreement

Name: _____

Email: _____

Telephone: _____

Mailing Address: _____

Signature: _____

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