Slow information in theory and practice: a qualitative exploration into the implications of a Slow perspective of human information behaviour

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Declaration

Abstract

This research project was motivated by the question of how a Slow perspective may relate to and impact upon theories of information behaviour and upon everyday information practices. Two related qualitative studies were undertaken to explore the relevance of Slow principles to the notion of the information society. The task-based, fixed end-points of existing theories of information behaviour and information literacy are shown to inadequately reflect the complexity of life in a social landscape characterised by the acceleration, and subsequent proliferation, of information channels.

The project progressed through three distinct but related phases which are reported here. First, the conceptual foundations of a Slow perspective were hypothesised during reviews of the literature and existing conceptions of the information society. A Delphi study was then executed to facilitate discussion of the issues between experts in information behaviour. Thirdly, a focus group session was held to engage Slow experts in similar discussion of the issues from a practice perspective. Each phase was guided by a social constructivist methodology which encouraged participants and moderator to engage in conscious consideration of their perspective by connecting and discussing with others, echoing the Slow principles that the project sought to explore.

A Slow perspective is shown to challenge received notions of information behaviour in three ways. The first two relate to fixed causal processes wherein the temporal progression of information behaviour and, relatedly, information literacy, is disrupted by a focus on tempo. The third challenge disrupts what ‘information’ is when society itself is perceived as information-based, shifting from an instrumental to an experiential view.

Elements of a Slow approach were reported in practice as a means of attaining ‘informational balance’, which in turn can be seen to encourage everyday information literacy. Specifically Slow attitudes were reported in some withdrawal and avoidance behaviours, and were also rejected when the pressure of informational speed and scale proved too beneficial, or indeed, too addictive.

The project concludes with an illustration of the implications of a Slow perspective of information behaviour, and recommendations for further research with this illustration in mind.

1. Chapter One
Background and nexus of issues

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1.1 Introduction

This research project is motivated by the question of how a Slow perspective may relate to and impact upon theories of information behaviour and upon everyday information practices. Personal and institutional management strategies come under increasing pressure as information channels accelerate and proliferate. Furthermore, the capacity for an individual to be information literate is increasingly challenged as people become overloaded. This work is intended to assess the potential of a Slow perspective as a means of alleviating that overload and increasing information literacy by reframing information management strategies at both personal and institutional levels.

1.1.1 Research questions & structure

The research question can be broken into three constituent and contributory questions:

1. What is a Slow perspective?
2. What, if any, are the implications of a Slow perspective for the study and theory of information behaviour?
3. What, if any, are the implications of a Slow perspective on everyday information practices?

Each of these questions will be explored in order to achieve the overall aim of providing a Slow framework for effective information practices, including both its production and consumption. This framework is likely to encourage the critical appreciation of the speed and choice inherent in many contemporary information channels, and all three research areas will hinge on these aspects.

The first question is explored by reviewing the relevant literature, and then by establishing an appropriate Slow perspective for considering information and information use. A conceptual framework will be built to support this perspective. This framework will be founded on a synthesis between

established ideas about the Information Society and notions of culture, communication and everyday practices. The literature is reviewed in Chapter One and the framework built in Chapter Two.

Question Two will be explored by testing the assumptions of the model in light of existing theories of information behaviour, through further conceptual analysis and also via a Delphi study which was devised to engage experts in the field in a discussion about the key elements of speed and choice. This phase of the research investigated the relevance of Slow to disciplinary perspectives that exist within LIS, and its potential as a metatheoretical or methodological lens. This constitutes Chapter Three.

To answer Question Three, the discussion from the Delphi was developed into an empirical study of Slow information behaviour amongst Slow adherents. This took the form of a focus group discussion about attitudes towards Slow principles in everyday information practices. This included discussion about everyday pressures, overload and coping mechanisms which might be included under a Slow umbrella. This phase provides the experiential evidence to round out the framework suggested earlier in the piece. This is described and discussed in Chapter Four. Chapter Five provides a summary of research findings, tentative conclusions and recommendations for applications and further research.

1.1.2 Methodological approach

Before describing the project's methodological approach, a distinction needs to be made between what is meant by 'methodology' and what is meant by 'methods'. This is a similar distinction to that described by Brenda Dervin as exists between metatheory and methods, and the bridges that must be devised between them (Dervin, 1999). For this project, the methodology, or methodological approach, is the overarching research philosophy and will be described here. This methodological approach dictates that certain methods, or research mechanics, are appropriate and therefore underlies all design and

analysis choices. These methods are described in the ensuing relevant chapters: the rationale, history and modifications made for the purposes of this research are also described there. Each method has been used because it correlates with the methodological assumptions of the overarching approach, and these represent the bridges of Dervin's distinction.

The methodological approach, then, derives from Slow principles which are, for want of a better word, 'soft'. The approach is entwined with and reflects what the research investigates. The conceptual implications of a Slow perspective of information are explored fully in the next chapter, but the assumptions which accompany it can be outlined here as the methodological approach. These inform the research agenda of the project, and are themselves dictated by the purpose and intentions of the work. 'Soft' does not imply 'weak', rather it demands creative design, sensitivity to data and reflexive reporting.

First, and most broadly, this project is therefore qualitative in nature. This stems from Slow being concerned with human thought and action. As such, human experience, perception and behaviour are the objects of study and "themes, patterns, concepts, insights, [and] understandings" (Quinn Patton, 2002, p. 5) the likely findings. Human behaviour is infinitely varied and research which aims to explore and describe it has similarly numerous potential forms. "Traditional methodology is an outcome of a rationalistic view", which then often fails to support the irrational nature of both researcher and researched (Seale et al, 2007, pp. 8-9). As a result, qualitative enquiry should be situated in the research context it aims to explore, which can be interpreted as there being no concrete set of defined rules to cover all eventualities and contexts.

Second, and in order to rein in the apparently limitless possibilities, this project rests on a foundation of specifically social constructivism. This stance holds that humans construct knowledge through their experiences, as in cognitive constructivism (Talja et al, 2005) but as Kim (2001) outlines, three specific assumptions underlie social constructivism:

- Ontological: "reality does not exist prior to its social invention"

- Epistemological: “individuals create meaning through their interactions with each other and the environment they live in”
- Learning: “meaningful learning occurs when individuals are engaged in social activities”, although not exclusively

Adopting this stance does not deny other theories of reality or knowledge, but defines the perspective which underpins the project and guides the research design. It is important also in distinguishing that this work is not concerned with discourse analytics, as would be the case in a constructionist approach.

Social constructivism is relevant to the Slow principle of connection, which centralises knowledge sharing and development as crucial. Whilst the processes of constructing socially and culturally determined norms are not themselves a point of enquiry, it is an assumption of this approach that this is how we understand and interpret reality. The two interrelated studies were designed in order to engender social interaction and discussion with this assumption in mind. The outputs of each study were analysed in specifically constructive ways, most appreciably by using elements of Constructive Grounded Theory (CGT; Charmaz, 2006). Only elements were used because the intention was not to generate theory *per se*, but to remain grounded in data that had itself been socially constructed.

Third, the approach is reflexive, as suggested by its qualitative nature. As with the Slow principle of mindfulness or critical awareness, the project encourages reflection through the design of each study. Engaging theorists to reflect on their own assumptions in the Delphi study and building “thinking pauses” into the focus group are examples of this consciously reflexive approach. The project itself is an exercise in critical appraisal of accepted, perhaps dominant, patterns of thinking. The conceptual framework was devised to establish where the project sits in relation to other, not necessarily LIS-based, perspectives and is an example of this critical evaluation of positions.

Each chapter includes discussion on how each method supports this overarching approach.

1.1.3 Ethics

When undertaking research of any kind, it is important to be aware of the ethical implications of design, execution and analysis in order to ensure research integrity. A researcher should engage with the subject of enquiry in a sensitive and honest manner, and should treat any participants with respect. It is important to appreciate the responsibility that comes with conducting research. This is applicable in both desk based and empirical scenarios, though at understandably different levels with different implications. This project involves both kinds of work.

The first two chapters of the thesis involve largely desk based research in the analysis of literature and the development of a relevant conceptual framework. The key ethical responsibility here was to reference others' work honestly and explicitly, to apportion credit to all relevant sources and, in so doing, avoid plagiarism. As such, it has been a conscious endeavour to cite works clearly, consistently and thoroughly.

This project subsequently involves two empirical phases: a Delphi study and a focus group. There was a responsibility here to undertake both studies responsibly; to treat participants with respect; to handle data sensitively, confidentially and appropriately; to record and report each process honestly. Both studies passed the City University ethics checklist and only minimal and predictable risks to both researcher and participant were identified. Furthermore, neither study involved covert data capture (Quinn Patton, p. 269) nor appreciably sensitive subjects, and were therefore deemed to represent minor interventions.

There were four areas to consider in the ethical design of each study, as laid out by the ESRC in the design section of the *Research ethics guidebook* (Boddy et al, 2012).

- Sampling

- Consent
- Confidentiality
- Methods

Participation in the Delphi was sought through voluntary involvement, which represents purposive and self-selecting sampling. This panel of people was relevant to the project because of their expert status. There was no structured consent form for participation in the Delphi, but written agreement to take part was sought and this represented valid consent. The panel's research backgrounds and knowledge of the subject put them in a position to agree to participate, or indeed to decline involvement. It was made clear that they were free to leave at any point. It was also made clear that all comments would be anonymised, unless it became necessary to identify contributors and only then by arrangement. The confidentiality of participants was thus ensured. The study was exploratory in nature and so its precise direction was impossible to outline at the start, but participants were actively involved in the Delphi's development over time and were therefore aware of what it involved. They were also constantly reminded of the opportunity to ask questions or withdraw from the process. The purpose and methods were made clear throughout the study.

Recruitment for the focus group was similarly self-selecting and purposive: participation was sought on a voluntary basis from groups involved with the Slow Movement. These groups are relevant to the project and the participation of people selected in this way was appropriate to the task in hand. Informed consent was sought from these participants as they were deemed to be less 'naturally' aware of what might be expected of them than the experts in the Delphi. As such, information sheets were distributed to explain the nature and purpose of the study, their expected participation, recording and outputs of the session, and the eventual publication of results. Consent forms were distributed alongside the information sheets. This process obtained valid and informed consent from all participants (Quinn Patton, p. 407). It was made clear that they were free to leave at any point without prejudice. It was also explained that comments would be anonymised, and that all contributions would be kept in a locked filing cabinet or password protected digital folders. This ensured confidentiality of participation. What was expected of their involvement was

outlined from the start: that the study involved a discussion group to which they were being asked for verbal and written contributions.

These were the key ethical considerations in designing this project. There is more detail about design choices and implications in the relevant chapters.

1.2 Human information behaviour

This project's essential area of enquiry is how people interact with and use information, and how those interactions are theorised and explored by the Library & Information Science (LIS) discipline. This first section, therefore, looks at "human information behaviour" (HIB) as a field within the academic discipline of LIS.

As Wilson suggests, research into information behaviour was occurring before Library & Information Science had developed an academic identity (Wilson, 1999). He cites a 1948 meeting of the Royal Society Scientific Information Conference as an early indicator of the interest in user studies; early in relation to the establishment of "information science" which emerged some years later. At the time of publication of Wilson's first information behaviour model, user studies constituted a large proportion of research endeavours in the discipline, second only to information retrieval (Wilson, 1981; reprinted 2006a). More recently, Wilson observes that "information retrieval has now migrated to the field of computer science and is unlikely ever again to constitute a strong research area in "information science"' (Wilson, 2006b). This, the author suggests, leaves user studies, or its descendant disciplines of information seeking behaviour and information behaviour, as the largest research endeavours in the field.

In contrast, Ingwersen & Järvelin (2005) assert that although the fields of information retrieval and information seeking rarely overlap, there is an opportunity and a necessity to bring them closer together. By stressing and exploring the human social context in which information retrieval occurs, their work seeks to create the holistic research area of Information Seeking & Retrieval, or IS&R, by reframing the models and methods of each in light of the other. This approach is in direct contrast to that of Wilson who perceives an unbridgeable gap between the two.

The subfields of LIS have a complex and contested relationship. In order to delimit the scope of this project, IR is considered to be a related field within LIS

with limited relevance to the tasks at hand. It is acknowledged, however, that Ingwersen & Järvelin's attempts to bring system oriented research together with social science oriented research under the LIS umbrella are more in keeping with the holistic intentions of this project than Wilson's segregated perspective. In its narrowest sense then, the subfield of information behaviour is interested in how people seek information. This "behaviour is so commonplace that it is generally not an object of concern until time pressure makes it so" (Case, 2007, p. 5). It can however encompass a swathe of research endeavours which are not limited to observing the search process but are also concerned with pre-and post-search phenomena. "Information behaviour" in this broader sense covers a range of information related areas and explores "those activities a person may engage in when identifying his or her own needs for information, searching for such information in any way, and using or transferring that information" (Wilson, 1999). These activities include "how people need, seek, manage, give, and use information in different contexts" (Fisher, Erdelez & McKechnie, 2005). Or it includes "encountering, needing, finding, choosing and using information" (Case, 2007).

Figure 1 below illustrates one interpretation of the constituent parts of human information behaviour as an academic discipline. The diagram shows Wilson's nesting of the different sub-fields within information behaviour, which is itself nested within a broader field of communication studies. "Information-seeking [is] particularly concerned with the variety of methods people employ to discover, and gain access to information resources" and "information search behaviour" exists as a sub-set of that field with a focus on computer-based information retrieval (Wilson, 1999, p. 263).

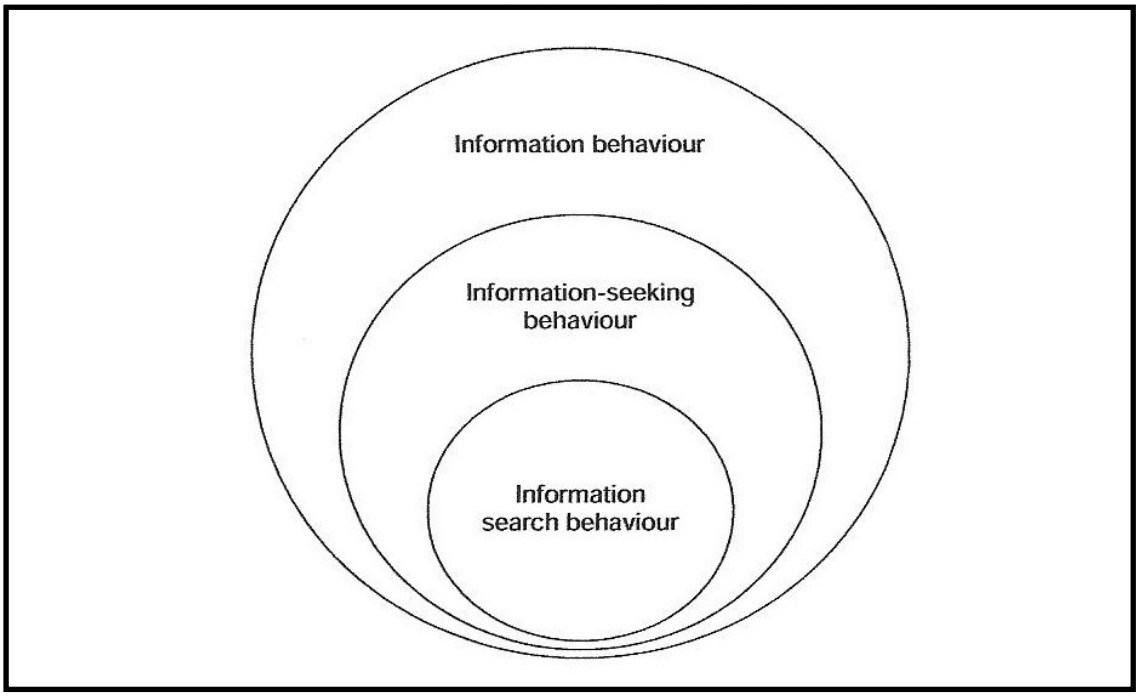

Figure 1: A nested model of the information seeking and information searching research areas (Wilson, 1999, p. 263).

1.2.1 Theory & theorising

The development of theory is important to academic disciplines because it establishes a sense of identity and reputation: “disciplines require theories that originate from within to attain recognition as an independent field of scientific enquiry” (Pettigrew & McKechnie, 2001). This is particularly important in the case of fledgling disciplines, such as LIS, and an issue which has sparked much internal debate (Hjørland, 1998; Wilson, 1999). In their 2001 analysis of LIS research, Pettigrew & McKechnie found indications of a “growing body of theory unique to IS”. The identification of 71 newly proposed theories suggested to the authors that theory was playing a more central role than previously thought.

Aside from developing theories, acknowledging one’s theoretical perspective is of vital importance. Even if the services paradigm identified by Järvelin & Vakkari persists (1985, p. 415), “solutions to practical questions are, however, always developed on the basis of theoretical and epistemological assumptions” which should be stated, if not developed further (Talja et al, 2005). So those issues being researched under the library paradigm generally require practical

solutions, but these too are theoretical in origin. This practical, perhaps humanistic and certainly contextual, nature of LIS research questions may be a reason for the multitude of individual mini-theories that arise from studies in the field.

The multiplicity of theories, particularly in relation to information behaviour, has been cause for concern. “Many researchers seem to prefer to develop their own models or frameworks from scratch, rather than to test and develop established models” (Bawden, 2006). This results in a lack of cohesion between theoretical concepts and effectively weakens the scientific claims of the discipline (Wilson, 1999). As Bawden points out, though, this may be as a result of a more humanistic approach (which seems understandable in a subfield, such as information behaviour, that is rooted in the human element of information phenomena) or indeed an egoistic approach to the subject whereby each researcher feels the need to develop their own, rather than build on prior, theories. Case points out that “it is difficult to generalize about a behaviour that varies so much across people, situations, and objects of interest, and so much of it takes place inside a person’s head” (2007, p. 5). This might be another reason for there seeming to be a model for every empirical, or indeed conceptual, investigation.

1.2.1.1 Layers

Whether theory is being generated or tested, it is possible to distinguish between different layers of theoretical engagement when undertaking any piece of research. A useful distinction is made by Bates (2005) between the following three layers:

- Metatheories: “the fundamental set of ideas about how phenomena of interest in a particular field should be thought about and researched” (p. 2)
- Theories: “a system of assumptions, principles, and relationships posited to explain a specified set of phenomena” (p. 2)

- Models: “a kind of proto-theory, a tentative proposed set of relationships, which can then be tested for validity” (p. 3)

This project engages with the subject of information behaviour on each of these levels, as will be illustrated in Chapter Two. An overview of Bates’ typology follows.

1.2.1.2 Metatheory

According to Bates (2005), and also Hjørland (2005), metatheories are methodologically important to LIS. They direct research agendas, inform analysis, and to some degree dictate the recommendations which might be made at the conclusion of a piece of research. They colour the perspective from which we approach our subject and therefore highlight different things as problematic or worthy of study. “Metatheories are theories about the description, investigation, analysis or criticism of theories in a domain” (Hjørland, 2005). A special issue of Journal of Documentation (2005) devoted to LIS and the philosophy of science highlights the range of metatheoretical perspectives and their impact on research agendas and design. This is both good and bad news: good because “we now have a much more diverse array of assumptions, approaches, theories, and methods from which to choose” and bad “because there is disagreement on what kinds of perspectives or actions are most appropriate” (Case, 2007, p. 143).

1.2.1.3 Theory

“Theories are explanations. They are generalizations. Theories are statements that try to explain relationships among various phenomena” (Case, 2007, p. 145). Theory is important to information behaviour. Working out why something is happening tends to be more useful than simply describing it and even when practical solutions are sought (as is often the case in information behaviour research), theory underpins and directs those solutions and should be acknowledged (Talja et al, 2005). It is slippery, multifaceted and controversial. Pettigrew & McKechnie faced difficulties during their citation analysis of LIS

research because different authors refer to theories using different terminologies (2001).

“A theory remains a mental construct. A ‘good’ theory is one that matches well our perception of whatever the theory is about” (Buckland, 1991).

1.2.1.4 Models

Models are important because they constitute the building blocks for theory. This is not necessarily always the case (for example, Grounded Theory arises from empirical observations and can be seen to skip over the model stage) but it is often so in information behaviour research. Models are numerous in information behaviour. Conceiving of an LIS spectrum, models tend either towards the computer science end (IR especially) or towards the social science end (user studies especially). These spectrum ends correlate with whether models are search based (computers, IR) or broad social behaviour based (humans, users). As Bates says, most theory in LIS is actually at the model stage (2005).

1.2.1.5 Examples

Terms such as ‘model’ and ‘theory’ are used with different intentions by different people within HIB, so that it is not always clear or consistent at what level of theoretical engagement their research operates. For example, the 71 *Theories of information behavior* (Fisher, Erdelez & McKechnie, 2005) are not necessarily all theories of the kind that Bates describes above: there are concepts, frameworks and models. Whilst Bates outlines her interpretation of the distinctions between different layers, not all writers in the field state their meaning with such clarity, if at all. The following works have been termed as both theories and models, by their creators and by subsequent commentators and researchers.

For the purposes of this project, these works are interpreted as classic examples of ‘models’ in the information behaviour field, which are of course

theoretical in nature. They are here described in order to suggest the type of work that occurs in this field, and also to intimate the areas which are explored in this project's two empirical studies. These examples have been selected because they are still used and developed in the field, and "are concerned…with a broader perspective of the information search than simply the use of computer-based information retrieval systems" (Wilson, 1999) which fits the scope of the project. However, the existence of IR search models is acknowledged. The examples here presented are in a roughly chronological order, with the exception of Wilson's revised model, included alongside the original, and Dervin's methodological approach whose essentially different character is introduced last.

- *Wilson (1981 & 1996)*

As with all but one of the following examples, and in contrast to the Wilson diagram already reproduced, the 1981 model is concerned with information *seeking* behaviour, rather than a broader notion of *any* interaction with information. More specifically, this model was devised as an attempt to bring order to the disparate field of "user studies" by "defining some concepts and by proposing the basis for a theory of the motivations for information-seeking behaviour" (Wilson, 2006).

According to this model, the motivation for information seeking is the existence of an information need. However, the model's key assertion is that information needs arise from other primary, and not necessarily information-related, needs. These may be physiological, affective or cognitive in nature, and may, in turn, also prevent the effective satisfaction of that primary need by forming a barrier (Wilson, 1999). The model therefore stresses the effect that an enquirer's context will have on the success, or otherwise, of information seeking at that point.

Wilson's 1996 model constitutes a revision of the 1981 original, expanded by the inclusion of theoretical models of behaviour from fields beyond LIS, such as psychology. It retains the focus on the person in context, but more explicitly states that contextual factors (here "intervening variables") may assist as well as hinder information use (Wilson, 1999). It covers more ground than its

predecessor by describing the different modes of information seeking behaviour which may result from the information need: passive attention, ongoing search and so on. But this model is purposely limited to describing those stages *before* information seeking occurs.

Both of Wilson's models invoke situations where a specific need motivates a person to seek information, although that search may assume a relatively passive form. This in turn suggests that the enquirer must initially identify that a need exists, although that may be a primary rather than a specifically informational need. This implied ability to identify or recognise a need also appears more explicitly in many definitions of information literacy, to be discussed later.

- *Ellis (1989)*

The Ellis model was devised as an empirically grounded approach to information-seeking behaviour, rather than the prevailing use of cognitive studies in the field (Ellis, 2005). The intention was to more usefully inform the design of IR systems and, in so doing, be of general interest to LIS. It provides an expansion of the behaviours that occur in the information seeking process. Ellis stresses that this model does not represent a clear-cut sequence of stages that a user goes through but that its 'features' are interrelated and their interaction will be affected by the specific situation of the person involved (Ellis, 1989).

These features can, however, be loosely arranged with the understanding that many aspects may occur simultaneously or in a different order in different contexts, including from person to person. Ellis (2005) suggests that "underlying the complex patterns of information-seeking behavior were a relatively small number of different types of activity ". These are: starting; chaining; browsing; differentiating; monitoring; extracting. As Wilson points out, these descriptive features operate at a different level to his own work, and can be nested within his model(s) as an elaboration of what happens once a need is recognised (Wilson, 1999).

The Ellis model scopes active seeking behaviours which were empirically observed in a variety of academic and industrial research environments. The emphasis on possibly non-sequential behaviours reiterates the impact of context on information seeking seen in Wilson, and the idea of 'differentiating' depicts a critical awareness and capacity to evaluate information as the process develops.

- *Kuhlthau (1991)*

In contrast to Ellis' model, Kuhlthau's *Information Search Process* explicitly denotes stages through which a user moves during "information seeking for a complex task that has a discrete beginning and ending" (Kuhlthau, 2004). It attempts to reimagine this process from the user's perspective which further grounds such behaviour in the experience of the person in context. The stages of Kuhlthau's model are in effect a process of refinement as the user constructs knowledge about the problem which initiated the search (Wilson, 1999).

The model is holistic in that thoughts, feelings and actions are attached to each stage in recognition of the complexity of such behaviours (Kuhlthau, 1991). In this way, the 'initiation' stage is characterised by uncertainty which becomes increasingly focussed as the process unfolds through 'exploration' and 'formulation' where feelings of clarity, confidence and relief are more prevalent. The key premise of this model is that it is founded on the concept of the 'uncertainty principle'. Uncertainty about meaning or knowledge initiates the search process and commonly increases in the early stages of information seeking.

Acting on the 'uncertainty principle' is another incarnation of the capacity to identify and do something about an information need. This is of even greater importance within Kuhlthau's explicitly time-constrained model, where users move through the stages of information seeking within a set period of time to achieve some sort of success. This quite specifically delineates the start and stop points of the seeking process which, in Wilson and Ellis, are implied.

- *Dervin (1983)*

Dervin's *Sense-Making* is similar to Kuhlthau's approach because of its user-centric core. It was devised to facilitate a shift away from source or system research to focus on the individuals engaged in information seeking. This approach deems information seeking and use to be examples of communicative practices. It differs from all the previous models, however, by most often being designated as a methodology rather than a model or theory. It is a whole way of research life. It foregrounds metatheory and dictates, to a degree, the methods by which it can be explored. It can and has been used "as a tool for metatheoretical critique, as methodology for research, as theory about communication, as research method, and/or as guidance for communication design and practice" (Dervin, 1999).

At root of the approach is a perceived gap between an individual's current situation and their desired situation. Information seeking can be seen as one activity that is undertaken to bridge the gap, or in other words to make sense of the gap. Where Wilson, Ellis and Kuhlthau explicate different points, features or stages of information behaviour, Dervin's approach is to draw together "needs, seeking and use into [a] unified investigation of the processes by which people become informed" (Tidline, 2005).

Because of Dervin's metatheoretical and methodological intentions, this 'model' operates at a different level to those previously described. It is broader in its general perspective of an individual's context which *includes* information behaviour, but it is also narrower in the implications on method and practice which this perspective generates. This appears to be a uniquely comprehensive approach in LIS.

- *Savolainen (1995)*

A relatively recent addition to information behaviour models is Savolainen's *Everyday Life Information Seeking* (ELIS; Savolainen, 1995). This model contrasts with most others because its focus is, by definition, everyday life. Where previous approaches have sought to describe and characterise behaviour in specific task-based, often work or research related, scenarios, Savolainen explicitly turns to people in their everyday environments. This is

relevant because this project seeks to understand everyday informational pressures and coping strategies.

Work in this area began to emerge during the 1970s (Savolainen,1995; Carey, McKechnie & McKenzie, 2001) and the model was formalised in the mid-1990s to address “the need to elaborate the role of social and cultural factors that affect people’s way of preferring and using information sources in everyday settings” (Savolainen, 2005). The author also sought to elaborate on the terminological issues inherent in information behaviour research, and to legitimise research into non-work information contexts which was perceived to be neglected in the classic models (McKenzie, 2003). Case (2007) describes our daily life as “peppered with instances in which we become interested in learning more about a topic after we accidentally encountering some bit of information about it” (p. 5). As a result, the information seeker or information user is framed as an information citizen (rather than worker or professional) whose daily or everyday life is the context of interest (Huotari & Chatman, 2001). Indeed, ELIS can be seen to emerge from ‘citizen information seeking’ (Savolainen, 1995).

The focus is on variety of experience and motivation which contrasts with the systematic nature of workplace research. “ELIS…is fluid, depending on the motivation, education, and other characteristics of the multitude of ordinary people seeking information for a multitude of aspects of everyday life” (Spink & Cole, 2001). It is, by definition, an unsystematic approach which might exacerbate the fractured multiplicity of HIB research introduced above, even though it is the role of LIS research to forge theoretical frameworks to unite the discourse and agendas that are being used and promoted (ibid.). The metatheoretical implications of ELIS are discussed by Dervin (1994) whose Sense-Making methodology is another example of a non-work approach.

McKenzie develops Savolainen’s interpretation of ELIS by describing the limitations of the classic models of information behaviour, and therefore highlighting the new angles enabled by an ELIS approach (McKenzie, 2003). The first angle is one which allows for undirected, even passive, practices where the incumbent models focus almost exclusively on active seeking; the

second moves away from studying single information needs in workplace settings towards “a holistic view of the variety of information behaviours individuals describe in their everyday lives”; and the third new angle, like Ellis, is a shift away from the cognitive approach which “fails to capture the richness of information as constructed through the interaction of the individual and the sociocultural context”. These three elements illustrate the interwoven nature of metatheory, theory and model.

Savolainen’s ELIS model is built on the concepts of ‘way of life’ and ‘mastery of life’. The former relates to a socially and culturally determined system of perceptions and values, and the latter relates to an individual’s active “preparedness to approach everyday problems in certain ways in accordance with one’s values” (Savolainen, 2005). The proposition is that information seeking is a fundamental way in which people establish mastery of life within a culturally determined system. McKenzie’s extension of ELIS seeks to illustrate the variety of information problems and practices that can occur, at the same time, within that system (McKenzie, 2003).

ELIS has, in many studies, become synonymous with ‘leisure’ practices because of its contrast with workplace settings and because of Savolainen’s own original distinction between working and leisure time under the heading ‘structure of time budget’ (Savolainen, 2005). This may suggest levity and has been combatted by Stebbins’ ‘Serious leisure’ (Stebbins, 2009) and Hartel’s use of Stebbins’ theory in information seeking research (Hartel, 2003, 2006; Kari & Hartel, 2007).

1.2.1.6 Summary: end-points & ‘successful’ information behaviour

Dervin’s approach is fundamentally without end because the behaviour it encapsulates is constant as individuals seek to make sense of their situation. This may occur in time-bounded scenarios with fixed desired outcomes, but can also be thought of as perpetual. The context changes the minutiae, but the overarching behaviour remains. In this way, the model becomes metatheoretical.

In contrast, Wilson, Ellis and Kuhlthau imply, and in some cases make clear, the contextual boundaries of the behaviours involved. They look specifically to proactive information behaviour in the form of seeking. This is usually initiated by the recognition of some need, then progresses through stages or displays typical features, and is ultimately resolved. Resolution may be unsatisfactory, but there is an end point to the activity or behaviour being described. These models may be termed task-based.

Savolainen's model also describes tasks which are undertaken, but on a routine or everyday basis. These are often non-work practices yet there remains the proactive context in the sense that individuals are displaying search and monitoring behaviour, or indeed withdrawal and avoidance. These are ongoing behaviours which may not have a defined end point.

The task-based models imply that individuals are successful or information literate, or that information seeking is effective, if they complete the task at hand, that is, if they proceed through the model (in whichever order context dictates) to the end-point. They may not be satisfied with the outcome, but they have reached one nonetheless. These examples can be thought of as describing the information literate person, and this disciplinary cross-over has received some recent attention (Shenton & Hay-Gibson, 2011). An introduction to the notion of information literacies now follows.

1.2.2 Information literacy

'Information literacy' is an established, and complex, notion within LIS whose presence in the literature has steadily increased since the early 1990s (Bawden, 2001). It is connected to information behaviour since information literacy affects and is affected by how people seek and use information. Indeed, "information literacy is the adoption of appropriate information behaviour" to critically match information to need (Johnston & Webber, 2003). The professional body for

library and information professionals in the UK, CILIP, defines information literacy thus:

> Information literacy is knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner. This definition implies several skills. We believe that the skills (or competencies) that are required to be information literate require an understanding of:
>
> - A need for information
> - The resources available
> - How to find information
> - The need to evaluate results
> - How to work with or exploit results
> - Ethics and responsibility of use
> - How to communicate or share your findings
> - How to manage your findings
>
> (CILIP, 2011)

There are parallels with some features of the task-based models described above. Identifying the need for information is explicitly noted, and other elements of information seeking behaviour are recognisable in understanding the resources available and how to find information from those sources. Further, the end-points of several models are reflected in the CILIP guidelines of understanding how to exploit results, and communicate or manage findings.

The parallel between models of information literacy and models of information behaviour is further illustrated through the sections presented in, for example, the Open University's Safari tutorial. These are:

- Understanding information
- Unpacking information
- Planning a search
- Searching for information
- Evaluating information

- Organising information
- Where do I go from here?

(Open University, 2012)

Information literacy can also be seen as a general notion which encompasses a number of specific skills-based literacies, including library, media and computer literacy (Bawden, 2001). It is also seen to encompass a far more complex set of attitudes and ways of thinking than these skills would seem to suggest (Mutch, 1997). There are numerous and varied interpretations and applications of the term which have an impact on how these skills or attitudes are to be taught and learnt (see Bawden 2001 for a thorough review).

Teaching the skills-based elements of information literacy is often the preserve of librarians whose knowledge of sources and the technical aspects of access puts them in prime position (O'Connor, 2009). How best to combine faculty level teaching and library led instruction is an ongoing area of research within LIS (Oakleaf, Millet & Kraus, 2011; Miller, 2010; Miller et al, 2010). The more complex aspects of 'true' information literacy are relatively unteachable since they do not conform to a list of competencies but rather are related to, or indeed centred upon, the capacity to think critically (Brouwer, 1997) which can be regarded as a product of lifelong learning, or 'learning how to learn'.

Being information literate in this broad sense has been noted as important to an individual's sense of and capacity for citizenship (Owens, 1991) and as vital to the future of the Information Society (Oxbrow, 1998). It has also been highlighted as useful in combatting information overload (Bawden, 2001) and library anxiety (Kwon, 2007). This project assumes and asserts that being information literate might also include the capacity to avoid or manage these and other information ailments, and also that the ailments themselves hinder an individual's capacity to be information literate by interrupting information seeking behaviour.

1.2.3 Information pathologies

It is useful to now introduce those situations in which effective or efficient behaviour is somehow hindered, and what steps have been observed or suggested to overcome that hindrance. Information behaviour and practices can be interrupted or hindered by the existence or perception of 'information pathologies'. For example, "the idea that there is too much information to hand, exacerbated by the multiple formats and channels available for its communication, has led to the concept of information overload, perhaps the most familiar of the 'information pathologies'" (Bawden & Robinson, 2008). Having too much information is in direct contrast to the related concept of information poverty, or being in "a state of ignorance about something" (Case, 2007, p, 103).

Overload, however, is not a particularly recent phenomenon: Bawden & Robinson identify the writer of Ecclesiastes as having felt overwhelmed by too many books and Wurman (2001) credits Georg Simmel with recognising the modern form of overload. Although it has been on the agenda for some time, in the last decade or so it has "become more widely recognised and experienced…exacerbated by the rapid advances made in information and communication technology" (Edmunds & Morris, 2000). Chan (2001) and Melgoza et al (2002) both describe the increasing amount of information available as being the reason for and evidence of overload. People with limited processing ability are "singularly unable to cope with this amount of information" (Chan, 2001), which is described as exponential, overwhelming and bombarding library users in particular (Melgoza et al, 2002).

Before tracing where attention to overload has occurred in LIS literature, it is worth noting several caveats as suggested by Bawden & Robinson (2008). First, overload is often scoped anecdotally rather than systematically. The approach is understandable, the authors say, because of the increasingly central role that information plays in everyday life.

It needs also to be acknowledged that "over-zealous information specialists" may be largely responsible for the creation of issues such as overload, for

which they can develop solutions. In drawing comparisons with the pharmaceuticals industry, Bawden & Robinson warn that “the information professions may exaggerate the pathologies of information”. Further, the professions may develop solutions for which they need to find problems, and this too may be a reason for the increasing professional attention paid to these issues.

Lastly, Bawden & Robinson “acknowledge that there is an element of fashion in the choice of the information pathology du jour”, so that overload has diminished in resonance since the turn of the millennium when there was a peak in LIS literature relating to it. However, as Tidline suggested in one of those papers, overload can also be seen as an enduring concept to the point of being “an overarching prescriptive belief” (Tidline, 1999). The assertion is made that “the abundance of solutions proffered for overload reduction emphasizes presumed cause and effect, precluding any need for systematic investigation of how people actually experience and cope with this modern-day problem”.

With these pinches of salt in mind, it is interesting to note the presence of overload terminology in LIS literature of the last 30 years or so. What begins during the 1980s as a library-based concern develops over 30 years into a seemingly pervasive quotidian phenomenon with, as Tidline (1999) suggests, little attention paid to verifying its origins or real existence. However, some early studies did seek to investigate the causes and nature of overload: Rudd & Rudd (1986) explored whether an increase in information load (the amount of information in a library system) necessarily resulted in information overload (users experiencing a “tuning out”, “confusion”, or “shutdown”). They conclude that the information explosion need not lead to overload, and that “computerization will soon be seen as a major way in which library users may access larger amounts of information than ever before, while simultaneously being less and less threatened by information overload”.

The librarian’s role in negating overload issues was also a concern in the earlier literature. This role was seen to be developing towards helping “users in narrowing or focussing their information searches to the most essential or key documents in a field of study” implying that deep and comprehensive subject

knowledge would be an increasingly important part of the job (Hopkins, 1995). A previous paper highlights the absence of need for librarians in most searches and perceives a situation in which they "have consistently failed to establish themselves as primary information professionals" (Biggs, 1989). Hensiak (2003) presents a variation to the usual approach by focusing on the effect of information overload on law librarians who are more often framed as helping others in such situations.

The impact of overload (rather than the causes) has been looked at outside of the library environment by, for example, Savolainen (2007), whose ELIS model was introduced previously. The author explored people's everyday coping strategies and found that, in practical terms, overload was rarely mentioned spontaneously. Some participants felt that overload was of such minor importance that it did not occur to them to employ coping strategies. Others felt especially that the internet and email contributed to a very real sense of overload, and employed filtering and withdrawal strategies to negotiate the situation.

There is an ongoing sense throughout literature that technology, whilst not necessarily single-handedly responsible for overload, exacerbates and exaggerates its impact. Usually investigated as a workplace issue, email is highlighted as a particularly overloading information technology (Ingham, 2003; Belotti et al, 2005). Workplace settings are a rich area for overload research (see Edmunds & Morris, 2000) both within LIS and also within the related disciplines of management and organisation science. However, there is a distinction to be made between these usually systemic views of overload, and a more human approach which characterises overload as an individual, psychological experience (Case, 2007, p. 103).

Eppler & Mengis' much-cited 2004 review of overload studies covers literature from organisation science, accounting, marketing and management information systems (Eppler & Mengis, 2004). This review identifies overload as an important consideration within these disciplines, the main focus being "how the performance (in terms of adequate decision making) of an individual varies with the amount of information he or she is exposed to". The authors summarise the

general findings across these disciplines as showing a positive correlation between performance and information quantity only up to a certain point, after which performance declines rapidly.

Eppler & Mengis analysed the literature along three key topic clusters: causes, symptoms and countermeasures. The causes were identified as:

- The information
- “The person receiving, processing or communicating information”
- The tasks in which the person is involved
- The organisational structure
- The technologies involved

Overload is seen to result from a mixture of these causes, rather than one single driving factor. Moreover, these factors influence both the processing capacity of the individual and the processing requirements of the task at hand: when these two elements are mismatched, overload can ensue.

The symptoms of information overload identified by Eppler & Mengis relate, as stated, to the individual’s capacity to make adequate decisions. They too vary in nature:

- Limited search and retrieval strategies
- Arbitrary analysis and organisation
- Suboptimal decisions
- Strenuous personal situation

There is, the authors say, “a wide consensus today that heavy information load can affect the performance of an individual negatively (whether measured in terms of accuracy or speed)”.

Lastly, the countermeasures proposed range from individual strategies that might be adopted, to institutional level policies. The importance of training is highlighted, as well as the provision of adequate tools to manage information load effectively. Collaboration is a controversial notion, seen by some as a

means of spreading the load laterally (Edmunds & Morris, 2000) and by others as a possible cause of overload in itself (Bawden, 2001).

The framework devised by Eppler & Mengis as a result of their literature review underlines the central position that overload research has assumed within some management disciplines. It is of enough concern for frameworks and, moreover, paradigms to be generated around it. The importance that theory and models have to a discipline was discussed in earlier sections (1.2.1, pp. 22-32). This position as a well-worn lens is especially clear in relation to decision making behaviour, and even more so in relation to consumer decision and choice which continues to grow as a research area (Sasaki et al, 2011; Messner & Waenke, 2011; Sicilia & Ruiz, 2010).

Information behaviour is entwined with decision making behaviour. A significant portion of the information behaviour literature mentions decisions to be made or problems to be solved (Case, 2007, p. 85). This is most often considered in terms of one-off information seeking tasks. A variation on this is evident in Savolainen's ELIS which focuses on everyday repeated behaviours, or practices, that assume a standard status. As Case suggests, the existence of these standard procedures that are altered only in the event of negative feedback is highly relevant to everyday information seeking (2007, p. 87). Overload is one such piece of negative feedback which interrupts standard procedures.

This review shows that information overload can exist at multiple levels, from the personal to the organisational. At its core is the perception that there is more information than can be adequately dealt with, and that this abundance of information interrupts an individual's capacity to make decisions and act accordingly. A single definition does not exist, but "the term is usually taken to represent a state of affairs where an individual's efficiency in using information in their work is hampered by the amount of relevant, and potentially useful, information available to them" (Bawden & Robinson, 2008). This project extends that view beyond 'work' to the everyday lives of individuals.

1.2.4 Everyday pathologies

Having considered overload in a specifically informational sense, this section establishes the notion of overload as an ongoing and current situation to be addressed in everyday life. In order to do so, popular perceptions of the phenomenon and suggested remedies are introduced.

This is a means of grounding the project in the real world beyond the academy, as well as positioning it within the literature. It is very necessary to situate the research problem as a qualitatively felt phenomenon in this way, as will be underlined in Chapter Two's treatment of the conceptual framework, and also during the Delphi panel's consideration of the difference between a field of study and the object of its attention (3.9.3.1, pp. 164-166 and 3.11.1, pp. 177-180).

1.2.4.1 Popular perceptions of overload

In order to look at everyday perceptions of overload, a broad search of newspaper articles from UK publications was executed, for the period from January 1st 2000 to the end of 2011. This search ["INFORMATION OVERLOAD"] was conducted using NexisUK News Search. It is acknowledged that writers using the term are likely to view the situation as problematic because of its inherent negativity. However, it was assumed that anyone arguing for the positives of the situation would just as likely use the term because of its anecdotal and widespread use. Selected results are presented here, and the search was complemented with other news stories which were identified on an ad hoc basis.

The results of the search indicate significant popular acknowledgement of the negative aspects of the expanding and accelerating communication of information. The results discussed here represent a wide spectrum of national newspapers, both broadsheet and tabloid, and from a spectrum of political persuasions and styles.

There is a sense, amongst the journalists and commentators involved that information overload can no longer be seen as “a fantasy of panicky Luddites” (Burkeman, Guardian, 2001). Indeed, over the course of the period under review, the term assumes an overarching quality used to describe contemporary society. Information overload defines “the age” (Evans, Times, 2011; Davidovitz & Levitte, Guardian, 2011); “the climate” (Kelly, Sun, 2011); “our world” (Tobin, Guardian, 2011); and “an era” (Rushe, Observer, 2011). Society is variously in its grip (Day, Observer, 2011) and blighted by it (Mesure, Independent on Sunday, 2011). “Perhaps the least controversial observation it’s possible to make about the world is that we live in an era of Too Much Information” (Burkeman, Guardian, 2011a).

People really do feel mentally and physically dragged down by the onslaught of digital information (Leith, Observer, 2009). Information overload is not a brand new phenomenon, but digital technologies and instant connectivity have made the problem more acute (Burkeman, Guardian, 2011a; Wighton, Times, 2011). People are unable to step aside from its snowballing path (Cartner-Morley, Guardian, 2009). The abundance of information is reported to have a range of adverse effects on health and well-being (Doyle, Telegraph, 2004; Cavendish, Times, 2005), as much as causing bewilderment (Soderblom, Times, 2000) and a sense of loss of control (Haywood, Sun, 2011).

Many early stories in this selection focus on the advent of email, and especially its impact on work-life practices (Moody, Mail on Sunday, 2000; MacErlean, Observer, 2000; Gomes, Guardian, 2000). Most of the material from the first two years of the search period focuses on work related issues, both from the point of view of the individual worker (Bateson, 2000a; Pendle, 2000) and in relation to business generally, finance in particular (Guarente, 2000a; Jackson, 2001). These early observations of overload seem relatively localised, where later in the selection it becomes a defining characteristic of daily life, as outlined above and as also illustrated in a number of articles regarding the dangers of too much street furniture relaying too many messages to drivers (Chalk, Express, 2010; Chapman, Mail, 2011).

Several articles offer practical suggestions on how to cope with the surge in communication (Oaff, Guardian, 2000; Bateson, Mail, 2000b; Kinchen, Sunday Times, 2011), and it is also reported that email has become a specific source of stress for surveyed workers (MacErlean, 2000). People are described as enslaved to their computers (Moody, 2000) and under pressure directly because of email (Hoare, Times, 2000). This is felt to such a degree that their brains are liable to "buckle and die with the stress of knowing too much" if the technology doesn't break down first (Burkeman, Guardian, 2001). One answer, it is suggested, is to actively monitor how much time is spent plugged in, and whose decision it is to stay connected (Burkeman, Guardian, 2011b).

So what drives people into these quite desperate situations? The feeling of being swept up in a spiral of perpetually developing gadget technology is documented (Johnson, Guardian, 2005), along with a candidate for both its cause and effect: connectivity (Cavendish, Times, 2005). Although many people are reported to feel that they can't cope with the sheer number of gadgets and associated operational information (Vickers, Express, 2004), others, though a minority in terms of this search, seem quite blissful in the face of such choice (Margolis, Mail, 2009). Indeed, one article bemoans the almost daily publication of another "crazy new scarestory about how we're burning out brains out with information overload" (Malbon, Telegraph, 2010).

As the period under review progresses, the nature of the material turns from being predominantly about places of work to individual lifestyles, and how the increasing volume of information, and the channels it is communicated through, impacts on fundamental choices, down to how we choose to remember our personal histories (Rowan, Times, 2002; Keegan, Guardian, 2002; Naish, 2011). An important overlap emerges between consumerism and information (Leith, Observer, 2009; Naish, Times, 2004). Since "we are told we are hyper-efficient superconsumers, ready to use technology to make the most of our time-poor environment" (Johnson, Guardian, 2005), it is a source of great tension that "too much information and too much choice now simply leave us bewildered" (Naish, Times, 2004).

The repercussions of this bewilderment are reported in a selection of the material. These repercussions include general, though serious, malaise as noted above (Leith, Observer, 2009) as well as a more specific instability in relation to knowledge and learning. The mass of information available via the internet and, specifically, social media is felt to disrupt chains of trust and truth (Bunting, Guardian, 2011; Williams, Guardian, 2011). In particular, young people are, it is reported, “becoming stupid” because of an increasing inability “to distinguish between important and unimportant information” (Norton, Sunday Times, 2001). This perception ties in with a more recent view that the education system should provide an antidote to the frenzy of modern life by offering a stable structure (Alibhai-Brown, Evening Standard, 2009; Evans, Telegraph, 2011).

According to this broad search then, overload is keenly felt in the ‘real world’. It is bound up with the speed of technology and communication, the quantity of information that this creates and the convenience such speed and such choice affords. There is also a sense of expectation that people should just keep up and participate in the acceleration by, for example, replying to emails instantly and buying the latest gadgetry to assist with this. The repercussions of failing to keep up, or trying too hard to do so, are described in terms of anger, frustration and general unhappiness.

1.2.4.2 Further perceptions

Beyond the newspaper search, a number of writers in the same period (i.e. the last ten years or so) have been considering the causes and the effects of overload in everyday life, with specific reference to information in almost all cases. Whilst much of this material draws together scholarly research from a variety of fields, it remains largely opinion based. It is nevertheless useful for building a picture of popular feeling about these issues in order to clarify and centralise the problem. A brief review of these books follows, organised by writer and according to the key areas emerging from the newspaper search: speed and time, choice and convenience, consumerist tendencies and the loss of everyday joy.

- *Too fast: James Gleick & Thomas Hylland Eriksen*

A central observation in both Gleick (1999) and Eriksen (2001) is that time has undergone increasing compartmentalisation since its standardisation during the Industrial Revolution. This is illustrated through the scientific history of atomic and rubidium clocks, the reclaiming of leap seconds and the division of nanoseconds (Gleick, pp. 4-7).

This relentless scientific segmentation means “time is hacked up into such small pieces that there is hardly anything left of it” in everyday experience too (Eriksen, p. 5). It gives the impression that there are now somehow more time units available, filling the gaps that were otherwise free (Eriksen, p. 21). This in turn suggests that there is more opportunity to save time, at work and in leisure, and exploiting these opportunities has in itself become something which we spend time doing (Gleick, p. 10). The cumulative effect is a sense of compressed, and therefore accelerated, time.

The qualitative experience of this compression is addictive, so much so that reclaiming even hundredths of seconds is “an obsession in all but a few segments of our society” (Gleick, p. 12). It is also presented as contagious, extending from the demands we make of technology and the media, to the frustration we feel waiting for a bus. “If one gets used to speed in some areas, the desire for speed will tend to spread to new domains” (Eriksen, p. 71). The primacy of instantaneity in the network is mirrored in our emotional lives (Gleick, p. 13).

The repercussions of this desire for speed, and of speed itself, are felt as a scarcity of control (Eriksen, p. 22), and as anxiety and stress (Gleick, p. 15). In relation to the communication of information “the wave patterns of all these facts and choices flow and crash about us at a heightened frequency” (Gleick, p. 10). We are, it is argued, in danger of being overwhelmed by the perceived acceleration of time, and the associated proliferation of information. The main culprit is not, however, information, or speed, but us. We are expected, and we expect, to live according to this acceleration (Eriksen, p. 58), and “we believe that we possess too little [time]: that is a myth we now live by” (Gleick, p.10).

- *Too much: John Naish & Barry Schwartz*

Society is operating at a faster pace and one vital repercussion is that “there is a growing amount of everything” (Eriksen, p. 89). Life is not simply quicker, it is now fuller than before, which makes choosing the right option even more complex. Naish’s (2009) focus is on the human behaviour which drives this overabundance of work, food, ‘stuff’ and information, while Schwartz (2004) explores the associated surfeit of choice.

Living at breakneck speed has engendered a culture whose “founding creed [is] that everything is much better if we can get hold of it sooner” (Naish, 2009, p. 243). This drives the creation of more and more ‘stuff’ to satisfy this belief, which consequently drives transient attitudes to possessions (p. 104), a preference for instant gratification (p. 247) and a general expectation of convenience (p. 249). The acquisition of, for example, more ‘stuff’ and more information is accelerated, in “the belief that there is no real point pushing on after the novelty…has worn off” (p. 249).

Where Naish cites convenience as the primary driver of our excessive behaviour, Schwartz highlights our cultural belief in “freedom, self-determination and variety” and our reluctance to surrender them (Schwartz, p. 3). The opportunity to rebuild durability and sustainability in this context is damaged by the quantity of options we are faced with. “As more decisions are required and more options are available, the challenge of doing the decision making correctly becomes ever more difficult to meet” (p. 74). This inability to identify the best option is compounded by a blindness to how important each decision might be (p. 75).

The repercussions are “considerably higher than mild disappointment” ranging from the fundamental issue of poor or inefficient decision making, to feelings of helplessness and regret (Schwartz, p. 201). Naish imagines the repercussions spiralling out on a global scale, the cycle of overproduction and overconsumption set to “continue until the planet is only fit for cockroaches” (Naish, p. 3). Both writers, however, and in addition to Gleick and Eriksen, describe a situation heavy with serious emotion and devoid of anything

approaching happiness. Indeed, the quest for happiness is held up as a barrier to itself by Naish (p. 11). It must also be said that not one wholeheartedly yearns for slower, simpler times. The solutions are not as easy as that, as will be reviewed in due course and in discussion of the Slow Movement.

- *Consumer expectation*

A common thread through these four texts is the consumerist tendencies which sustain the speed and choice deemed to be so problematic. This is illustrated by Naish's focus on convenience culture and Schwartz's exploration of consumer choice. The argument is, as we have seen, that because instantaneity saves us time it is desirable (Eriksen, p. 71), and because we can obtain instantaneity in consumer contexts they too are desirable (Naish, p. 104), and so we pursue comparable efficiencies in all contexts of our daily lives, no matter the negative repercussions. The supporting argument is that because we have such freedom and variety of choice in consumer contexts (Schwartz, p. 99), this too is desirable, regardless of the potential overload. We expect as much freedom in all our decision making.

Another point to tease out of this material is that consumerist behaviour is not seen to just be about making the best choice as quickly as possible. Consumers are not as rational as that (Schwartz, p.19). It is also linked to projecting ideas about social comparison and status (ibid., pp. 189-190), relative prosperity (Naish, pp. 89-90) and the broad spectrum of people against whom we can now compare ourselves given the rise and reach of celebrity (ibid., p.81).

1.2.5 Everyday solutions

Three of these writers directly suggest remedies for the issues that they have each observed and presented. These prepare the ground for discussion of the Slow Movement by representing elements of that approach, without embodying it entirely. What is interesting at this point is that remedies are at least suggested, illustrating that the overwhelming effects that this material describes are not considered to be a terminal situation by the authors. This suggests that

a Slow framework for use in the more specific realms of information and the LIS discipline could be possible if similar perspectives on overload exist there.

On the other hand, James Gleick's dystopian treatment of acceleration appears to be without solution, rather the implicit suggestion is that if nothing is done, volatility and chaos will increase. It is also possible to identify his belief that simply increasing the speed still further will not address the skewed nature of life as he sees it because "efficiency does not imply equilibrium" (Gleick, p. 285).

John Naish's approach to overload and its solutions operates on a wholly more individual level and as such, his writing contains very precise suggestions as to how we might embrace 'enoughness'. The notion that binds all of his remedies is mindfulness which encourages "purposefully paying attention to the moments of life that you are in" (Naish, p. 252). This, he suggests, can be achieved by defining your limits with data-diets and time budgets, by recognising the futility of the struggle to know or have everything, and by appreciating the source and monetary value of material goods. Overload, he asserts, is an individual responsibility and the solutions must be too.

Barry Schwartz's focus is also on what the individual can do to "mitigate – even eliminate – many of these sources of distress" (Schwartz, p. 221). Although he is writing about the quite specific sphere of consumer decision making, there are parallels with Naish's ideas about recognising limits. Satisficing is encouraged over maximising, expectations and social comparison should be controlled, and constraints should be appreciated as ways of decreasing the number of choices we have to make. Schwartz also suggests a series of changes that we must make to our patterns of thinking if the burden of choice is to be lessened: proactively engage with the decision making process; anticipate more; regret less.

Eriksen's *Tyranny of the moment* is the most information-centric material introduced in this brief review. His proposed solutions are grouped into what the individual can do, and what policy makers and employers can do. The core, and seemingly counterintuitive, proposal is that "what can be done quickly, should

be done quickly" (p.154): core because it clarifies the key notion that Eriksen is not anti-speed and yet counterintuitive because it apparently contradicts the title of the solutions chapter, 'The pleasures of slow time'. As Eriksen explains, his position is not about denying fast time, or the benefits of accelerated communication, it is about preserving the space which enables the survival of necessarily slow processes (p 152, p. 164). To that end, he proposes a 'personal training programme' to encourage conscious interaction with the tempo of different processes (pp. 154-160): embrace dawdling and delays to allow creativity to fill the gaps otherwise consumed by time; be conscious of the switch between fast and slow processes; accept that nobody will ever know most things. Romanticising free time is unhelpful because the fact remains that decisions still need to be made.

The solutions offered by Eriksen go beyond individual choices, to what policy makers and employers should do to enable this space for tempos to flourish (pp. 161-164). Media guidelines should include rules about different tempos for different types of news stories, and all information providers (including academics and authors) should reduce the quantity of material they produce. Public spaces should be planned with slower tempos in mind, and telecoms should be banned from them. Employers should incorporate offline time and holidays into the working day, and admit what conferences are really for, so that interpersonal relationships are strengthened and made more human.

This section has brought together a variety of popular perceptions on overload, and introduced some of the suggested solutions. Section 1.3 below outlines the Slow Movement as a particular approach to social life which can be seen to combine many of the issues raised here.

1.3 The Slow Movement

A further general approach to combating accelerated life has evolved over a number of years. This is the Slow Movement, and its development and application will now be introduced. It has been described as “organized signs of dissatisfaction with the pace of life in developed industrial societies” (Tomlinson, 2007, p. 146).

1.3.1 History & applications

The Slow Movement has come to be an umbrella term for a variety of areas which have developed in the name of Slow, of which the core and founding branch is Slow Food. Throughout the 1970s, a group of left-wing writers in Italy, “nurtured by a vision of life that was at once ethical and hedonistic” (Petrini & Padovani, 2006, p. 45), turned their efforts of reclaiming Italian tradition to supporting and promoting local culinary cultures. The political orientation of the group was made clear in the publication of the Slow Food Manifesto in 1989 which was intended to reach out to “the multitude who mistake frenzy for efficiency” (Portinari, 1989) and their most vocal member, and current president, Carlo Petrini, brought his experience in local politics to the group. Petrini, and others, had organised a protest against the opening of a McDonald’s restaurant in Rome in 1986. The protesters brandished bowls of penne as a demonstration against the non-sustainability of the fast-food industry and the related destruction of local culinary culture and gastronomic tradition.

Today, Slow Food has over 100,000 members worldwide (Slow Food, 2012a), each contributing to the protection of the gastronomic tradition of their local culture. Officially recognised as a non-government organisation, Slow Food also lobbies the EU with considerable political force on eco-agricultural issues. Local branches of Slow Food are known as *convivia* because it is through these groups that the core philosophy of conviviality is expressed, and through which people can learn “to be open to sensory pleasures, the company of others, and an attentiveness to self” (Parkins & Craig, 2006, p. 20). Ethical consumption of

local produce is of paramount importance in Slow and it runs alongside the notion of taste education, of “developing taste rather than demeaning it” (Portinari, 1989), so that people are able to step outside of fast food channels and recognise the quality and provenance of their food.

Slow Food elevated taste education to a formal level in 2003 when the *Università degli Studi di Scienze Gastronmiche* (University of Gastronomic Sciences) was founded near Bra, Italy, the town where Slow Food has its headquarters. The University’s “goal is to create an international research and education center for those working on renewing farming methods, protecting biodiversity, and building an organic relationship between gastronomy and agricultural science” (University of Gastronomic Sciences, 2012). This academic institution, combined with the Slow Food Foundation for Biodiversity, work to raise awareness of alternatives to fast food and fast living. In striving to protect current food products from disappearance, the Foundation maintains the Ark of Taste which lists endangered products by country that “have productive and commercial potential and are closely linked to specific communities and cultures” (Slow Food, 2012b). This demonstrates Slow’s readiness to exploit contemporary opportunities (in this case, commerce) to protect tradition and diversity.

Slow principles have spread beyond food and beyond Italy, to apparently include any area of life which an individual may feel they have lost control of. It encourages making connections “to people – ourselves, our family, our community, our friends; to food, to place (where we live), and to life” (Slow Movement, 2012a). The loss of connection to these areas, and to the natural tempo of life, is a result of filling the time saved by technological developments with more haste and more ‘stuff’, rather than preserving it for leisure. The Slow Movement encourages purposive reflection about the choices we make every day, and encourages that those choices should be made according to the values of transparency, simplicity and consciousness (World Institute of Slowness, 2008).

With its emphasis on agriculture and rural sustainability, the Slow Food ethos initially appears incompatible with urban settings and lifestyles. However, the

general doctrine of purposive reflection and social awareness has filtered through to engender Slow Cities (or *Città Slow*). Strict pledges concerned with environmental policy, hospitality and a sense of community, are laid out in the *Città Slow* guidelines against which a town must assess themselves if they are to gain full membership of the network. There are currently 147 Slow towns worldwide, 5 of which are in the UK with a sixth to be added imminently (CittaSlow UK, 2012). This illustrates that the movement is current and regarded as a valid approach to modern life in some areas. No town of more than 50,000 inhabitants can become Slow, a size limit which "aims to facilitate the virtues of urban living while minimizing conventional problems" (Parkins & Craig, 2006, p. 30).

The guidelines and pledges governing *Città Slow* predictably relate to the environment and agriculture, but also take in urban planning, technology and business with the intention of enabling Slow life in as many contexts as possible. If an initiative is thought to improve quality of life, *Città Slow* embrace it: electric buses in medieval towns, the technologies required to provide solar and other renewable forms of energy (Honoré, 2004, p. 87) . Many people in huge cities have also grasped the Slow ethos and attempt to apply it as best they can to their frenetic lifestyles: some Slow Movement members even believe that this grass-roots application of Slow principles is more in keeping with the movement's underlying values than the privileged membership of *Città Slow* (Slow Movement, 2012b).

1.3.2 Broad principles

The application of Slow manifests itself in many ways. According to Carl Honoré, exponent of the Slow lifestyle and author of *In praise of Slow* (2004), there are opportunities to reconnect and rebalance, and evidence of people doing so, in the food we buy and how we eat it, the cities we live in and how they are planned, the attention we pay to our mental and physical health, and the ways in which we spend our work, family and leisure time. Information use is not mentioned explicitly. Just as Eriksen stated that his argument was not

directly against fast time, so Honoré begins his proposals by saying that “this book is not a declaration of war against speed” (Honoré, p. 4). His assertion, like Gleick’s, is that our love of speed has become an obsession, an addiction, “a kind of idolatry” which must be confronted. As was seen in both Eriksen’s and Schwartz’s treatments of overload, the concern is that speed and instant variety have become central characteristics of all processes: “when you accelerate things that should not be accelerated…you forget how to slow down” (pp. 4-5).

The idea that Slow could apply in almost every area of life might be seen to contradict the central tenet that different processes require different attitudes to speed and choice. This is, perhaps, an issue of terminology. ‘Slow’ implies ‘not fast’, but the Slow Movement is resolutely not anti-speed. Rather it is concerned with how individuals might better “negotiate the different temporalities that they daily experience” (Parkins & Craig, 2006, ix) and the contemplative attitude to consumption which that demands and promotes (ibid., p. 132). “It is a response to a complex and value-ambiguous cultural condition rather than to an obvious situation of social injustice or oppression” (Tomlinson, 2007, p. 148), the cultural condition in question being that of immediacy.

The fundamental driver is the personal and individual quest to regain not just control but also enjoyment of the everyday, and indeed the two are closely tied. If we think outside of our habitual behaviour (which is mostly directed by dominant modes of operation), pleasure springs from this mindful experience rather than from instant, unthinking excess (ibid,. pp. 94-95). The key values are not Puritanical abstention and patience, but focus and balance which “are distinctly modern ideas” when used to take “a grip of the speed that surrounds us in ways that reflect the energy of modernity” (Tomlinson, 2007, p. 153).

Interestingly, neither Carl Honoré nor the Parkins & Craig publication *Slow living* (2006), directly mention information overload or the effects that applying Slow principles to information communication might have. Honoré describes how “the information highway carries over five billion emails” every day but leaves the situation unchallenged, implying that there is little we can do about it. He also mentions reading, an example of information use, as an antidote to the cult of speed, but does not consider the overwhelming effect that the rise in book

production has helped to create (Eriksen, pp. 89-93). Honoré also neglects the idea that speed can intrude upon the act of reading, just as it can intrude on the areas of life he does cover.

John Miedema, however, explores exactly this issue in his book, *Slow reading* (2009). Frustrated with information overload and the rush of modern life, more people, he says, are turning to slow reading as "a pleasure when reading fiction and an aid to comprehension when deciphering a complex text" (p. 2). The emphasis on difference is once more apparent: slow reading is not the direct opposite of speed reading, it is taking the opportunity to choose which tempo is appropriate. Crucially, such behaviour must be voluntary, and is as much a reaction to being forced to read as quickly as possible as it is a style or technique in itself (pp. 15-16). This practice, based on close or critical reading, seems a useful means of combating overload, and it is indeed very Slow in its purposeful pursuit of pleasure and deep comprehension.

However, Slow information practices (whatever they might be) are largely absent from these proposed popular solutions to overload. Turning technology off is one broad response, but that denies the benefits of speed which Slow endeavours to exploit. Making informed and responsible decisions to better navigate the overload is also suggested, but that presupposes that the time is available to do so. Slow practices would largely be personal behaviour choices, but might also be embedded in policy. There seems to be a strong case for Slow as a remedy for everyday overload, which in turn is possibly information-based (but not reported as being so). As a remedy for information overload, the case seems similarly strong but unreported.

1.3.3 Key themes & information

A common theme in Slow approaches is the desire to regain control and balance that has somehow been lost or sidelined. Whilst this is a subjective perception, it poses very real problems to those who feel this way, as shown in the popular interpretations and experiences of overload and in the suggested

solutions from, for example, Naish and Honoré. In information terms, this can be seen as the desire to regain or attain Savolainen's 'mastery of life', to have the ability and opportunity to apply appropriate strategies, or to have "the scope to intervene, to apply deliberate pressure to either pedal" (Tomlinson, 2007, p. 154). There are two areas in particular which resonate in thinking about information along these lines: control of time and control of consumerist choice or tendencies.

Firstly, those who adopt Slow approaches seek to regain control of time, on a personal level and also in their interactions with other people, organisations and institutions. There is a feeling in Slow literature that the pace of life has accelerated and this causes a pressure to behave increasingly quickly in the majority of situations. This interrupts personal choice to such a degree that critical thought is diminished and there is little room for reflection or connection.

This relates to the second area of consumerist tendencies which are also felt to have accelerated in terms of accessibility and development: there are more new 'things' available more rapidly and more easily than previously. Obtaining more 'things' has become *de rigueur* simply because it is possible, and the speed of their delivery is arguably a selling point in itself (Tomlinson, p. 139). Slow philosophies emphasise the mindful elements of both areas so that time and space are created to engage in appropriate consumer behaviour.

1.3.3.1 Time

It is not within the scope of this project to analyse the philosophical arguments around human perceptions of time, but a review of its treatment within LIS, and specifically within information behaviour, is pertinent. As Savolainen (2006) says, "one of the problems of defining temporal factors is that they tend to be 'everywhere' because time is embedded in all human action" or indeed vice versa. Time is therefore an important variable and influence on information behaviour, but it is rarely defined or conceptualised in the literature because of its ubiquity, if it is mentioned at all.

Only a quarter of the entries in Fisher's reader on information behaviour (2005) mention time as an influence, and none cite speed or acceleration specifically. Time is often represented as a finite resource which causes pressure in its scarcity, most explicitly as a factor in the equation for deriving affective load (p. 41). The equation's other factor, "irritation + frustration + anxiety + rage", is multiplied by that pressure. Because time is scarce, it follows that information seeking should occur as rapidly as possible in order to alleviate the pressure: the less spent, the better.

This is also reflected in Zipf's much-cited Principle of Least Effort (Zipf, 1949) which has been adopted by many in LIS as a general model for information seeking behaviour (see Case, 2007, for examples). This principle posits that people generally will behave in ways which require the least average effort, or which offer the greatest benefits against the lowest costs. These costs can be thought of in temporal terms, so that the less time a particular way of completing a task will take, the more likely it is that way will be chosen. This can be extended to information choices which is reflected in the task-based models described before, where reaching a specific goal in a limited time-frame is central (for example, in Kuhlthau's Information Search Process).

Time as a resource is one of three approaches identified in the literature by Savolainen (2006). A related approach, which is also reflected in Kuhlthau's work, is of "temporal factors as qualifiers of the information-seeking process". The end-points of task- and stage-based models imply a point to which the information user is travelling: there is a sense of chronological process. Any model which frames information seeking in this way is using time as a boundary of behaviour, which is then a temporally fixed process. Wilson's 1981 model reflects this, as does Kuhlthau's ISP. It does not, however, also imply a fixity of behaviour, which can loop back on itself and progress along different lines according to the individual and other variables. This non-linearity of behaviour is reflected in Wilson's later developments and also in Ellis' 'features' of information seeking.

Temporal influences are most often implied through end-points and chronological progression, rather than extrapolated or conceptualised. This is

likely due to the difficulty of doing so, and the natural (obvious) ubiquity of time. This is keenly illustrated in the third approach identified by Savolainen which includes work where time is itself the context in which behaviour occurs (Savolainen, 2006). Here, time is an abstract concept that exists across all situations. Its influence is bound up in fundamental human existence that it is impossible to tease out. In this sense, information users exist and their behaviour occurs at points in space and time. Dervin's Sense-Making adopts this approach by being more general in nature, although she has argued against this sense of context as "a kind of a container in which the phenomenon resides" (Dervin, 1997). Nevertheless, much empirical work in information behaviour asserts this approach by pinpointing the temporal moment at which information seeking occurs.

In models which describe task-based information seeking, there is an assumption that information is best obtained as quickly as possible. Successful information seeking, or information literacy, here relies as much on speed as it does on knowledge of sources. There is no literature that is concerned either with the possible benefits of acting slowly, or with the effect of acting at varying tempos. The effects of temporal factors on information seeking which occurs outside of specifically task-based situations is perhaps more complex, as Case describes (2007). Hartel's work with Serious Leisure has sought to describe the information behaviours of hobbyists without externally enforced time boundaries (2003). A Slow approach to time in information seeking would emphasise the choice and the need to engage in a variety of tempos at different points in time.

1.3.3.2 Consumption & consumerism

Consumption and consumerism should be interpreted as two distinct aspects of the background to this project. On the one hand, consumption is opposed to production and implies the processes that occur somewhere along the information (or other) chain. On the other hand, consumerism is an approach to consumption that often entails some commercial aspect. It implies an attitude, on the part of both producer and consumer that expects, amongst other things, value, quality and efficiency. As with time, Slow adherents often perceive that

the opportunity to choose how and when to consume has been sidelined in contemporary culture, and seek to regain an element of control in this area too.

- *Consumption*

There is a substantial body of literature in the field of cultural studies that explores the role and nature of consumption, the most relevant area being media consumption. Media consumption tends naturally to relate to television, radio and internet use, and studies are often bound by geography. For example, two recent studies looked at media consumption in India (Singh & Punjabi, 2011) and Russia (Kolomiets, 2011) highlighting the increasing influence of technologies and media flows on the social and commercial life of these countries. There is a relationship between this section of cultural studies and LIS: 'media' in this subject domain could be 'information' in the other.

Media consumption literature can be positioned along a spectrum of focus: from the commercial end of marketing and advertising (Thomson & Laing, 2003; Singh & Punjabi, 2011) to less commercial, more sociological research concerns such as the role of media consumption in the formation of identity (Strelitz, 2002) and community (Shields, 1992; Couldry et al, 2007). This project is situated alongside the sociological explorations, although the commercial end has some resonance, not least in light of the consumerist tendencies which form the background to Slow. This will be assessed in due course.

The emergence of digital technologies has modified the character of the media so that traditional ways of talking about 'media consumption' are no longer adequate (Kolomiets, 2011). The experiential view of consumption holds that technology has transformed the experience by synchronising transmission and reception, and by allowing content to be reformatted at will (Addis, 2005). The frequency of "reception in a state of distraction" has been increased by the multiplication of communication channels and objects available. The need for meta-information to explain this multiplication leads to a parallel need for "meta-consumption" (Rutsky, 2002).

Moreover, the instantaneity of consumption is seen as a central principle of cultural modernity, encapsulated in a "condition of immediacy" which arises

from a widespread reliance on communications media and information technologies (Tomlinson, 2007, pp. 74-75). The attraction of these technologies and, indeed, one of their key selling points, rests on their “impatient and immoderate” nature (ibid., p. 132).

As mentioned above, the consumption of media can be seen to influence and be influenced by the social structure in which it occurs. Kolomiets (2011) describes it as a “social practice of using communication means (the media) to obtain and use symbolic content and be involved in social connections and interactions”. Rather than the passive reception of media products, it is the active practice of processing symbolic material as enabled or hindered by the socio-historical context of the individual. This context has been modified by the advent of information and communication technologies.

As a social practice, media consumption supports the formation or confirmation of individual and collective identity. Strelitz (2002) found that a group of students at Rhodes University in South Africa gathered to watch television programmes that reflected their rural backgrounds, and in doing so emphasised their feelings of isolation from the rest of the mostly middle-class student body. A sense of community membership was established through this practice. The wider sense of belonging to a community, as implied by ‘citizenship’ or the term ‘public connection’, can be traced through media consumption. Couldry et al (2007) assessed the extent to which shared practices of media consumption also reflect shared orientation to a public world.

Media consumption (and production) is an important notion with widespread social value and influence. As suggested, it echoes and mingles with information research. It has been used to quantitatively assess the emergence of the Information Society (Skogerbø & Syvertsen, 2004) and, conversely, levels of information consumption (and production) have been used to assess centres of media power in the USA (Kellerman, 2000). This relates to issues of whether it is really possible to measure information or media consumption other than by quantitative means, issues which relate to the nature of information and which are discussed at greater length in the conceptual chapter to follow.

Changes to the media have brought about changes to media consumption, but Cohen & Rutsky (2005) regard these changes as being even more fundamental: “understanding our changing relationship to consumption requires a re-examination of the often unstated assumptions that underlie our views of consumption.” They assert that profound questions about what constitutes consumption need to be asked precisely because of its complex, dynamic and variable relationship with information. Knorr Cetina (2010) uses consumption theory to model the use of financial information in order to outline the epistemics of information, again illustrating their fundamentally interwoven nature.

One reassessment of what constitutes consumption perhaps lies in bringing notions of production together with those of consumption. Deacon (2003) argues that in dividing the two processes, researchers tend “to underestimate, or even deny, the complexities of social and cultural processes beyond their immediate purview”. Acknowledging the relationship between the two ends of the spectrum allows for a more holistic view of their nature. This approach is encapsulated by ‘prosumption’, a term employed to describe the increasing levels of participation required on the part of the traditional ‘consumer’. Ritzer & Jurgensen (2010) argue that whilst attention has shifted to this participatory form of consumption only recently, it has existed in several forms for decades. Examples given include self-service petrol stations and restaurants, as well as calling in to participate in a radio show.

A reason that attention has shifted to prosumption is the advent of participatory information technologies, specifically Web 2.0 and social networking sites online. Ritzer & Jurgensen suggest that the popularity of Web 2.0 applications establish them as “the most prevalent location of prosumption and its most important facilitator”. This is echoed by Beer & Burrows (2010) in their introductory article to the special issue in which Ritzer & Jurgensen’s piece appears: Web 2.0 has modified the form of consumption to demand active participation where before none was required. This is the consumption of information.

- *Consumerism*

This can also be seen as an intersection of consumption and consumerism, indicating the increasingly commercial (perhaps pseudo-commercial) nature of contemporary consumption. This intersection is described by Juliet Schor (1999) as a "new politics of consumption" which entails an "upscaling of lifestyle norms; the pervasiveness of conspicuous, status goods and of competition for acquiring them". She highlights the social (American) context in which consumption occurs as one of acquisitiveness and compulsion, rather than one of need. As described in the preceding sections concerned with overload (1.2.3 and 1.2.4, pp. 35-45), there are a range of responses to this profusion of 'stuff'.

In consumption terms of how to negotiate this profusion, one such response is the adoption of the "craft consumer" role (Campbell, 2005). In developed societies where profusion is linked to commodification, individuals are prompted to "seek new and more effective ways to combat its effects". The craft consumer is one who engages in a form of prosumption by modifying and personalising commercially acquired items in order to render them special or more valuable. It is a form of subversion which offers the opportunity for self-expression and creativity, in line with the authenticity often ascribed to craft production as it contrasts with mass production. This image, Campbell argues, should be "set alongside those of 'the dupe', 'the rational hero' and the 'postmodern identity seeker'." Other possible incarnations of the consumer are available: chooser, communicator, explorer, hedonist, artist, victim, rebel, activist and citizen (Gabriel & Lang, 1995).

Critical consumerism often depicts the consumer as one who invests politically in their consumption practices. They are concerned with the economic and environmental impact of their choices. Slow Food has been cited as a movement which feeds this personal approach to consumption whilst also training the consumer in the aesthetics of pleasure (Sassatelli & Davolio, 2010).

That there are many interpretations of the term 'consumer' will become more pertinent to this project's exploration of disciplinary perspectives and the information actor's role in the contemporary information environment. It has been used in sections of the LIS literature, with apparently little thought given to

its various connotations. This is perhaps understandable given that it originates from a different discipline and is defined more closely in that field. However, “the consumer has become the focus of extensive debates in many human sciences, including economics, sociology, psychology, cultural studies” (Gabriel & Lang, 1995) and should be approached critically within LIS too. Consumer health informatics, which is beyond the scope of this project, is an established field derived from the existing notion of consumer health: “the field devoted to informatics from a consumer view” (Hersh, 2009).

The information user has been described as an information consumer (Nicholas, 2003; Withey; 2003) who promiscuously jumps from source to source, flicking and bouncing without taking much notice, because “the wealth of alternative digital sources enables them to do so” (Nicholas et al, 2003). At the same time, the information consumer is suspicious of many sources and unpredictable in their choices. They “seem to crave information to an extent that is surely unparalleled in the history of mankind” and “simply shop around for information and…take decisions for themselves on what they perceive to be appropriate to their needs” (Herman & Nicholas, 2010). Moreover, “consumers do not even remember where they went on their journey or if they will retain any of the information, nor how they can get return to it [sic]” (Nicholas et al, 2006, p. 227). One reason for using the term ‘consumer’ instead of ‘end-user’ is that “there are too many of them, and…they have considerable clout” (ibid., p. 206).

There is however, a sense that information organisations, and especially libraries, are somehow exempt from or should resist consumerist tendencies. “The fact is that the role of the public library as a social, educational and recreational space is becoming increasingly challenged by commercial alternatives that offer quick and efficient gratification for citizens” (Rooney-Browne & McMenemy, 2010). Years before the prevalence of digital information, some quarters questioned whether the proposition ‘customers of libraries are consumers of the services and resources provided by librarians’ could ever be appropriate. The feeling being that it was appropriate in retail but not in librarianship (Jones, 1998). This creates a tension between how LIS practice views its place in consumer society, as an impartial non-consumerist

space, and how LIS research frames the behaviour of digital information users, as consumers.

1.4 Summary

This opening chapter has described the motivating questions underlying the project, and the methodological perspective from which they were explored. The broad subject of enquiry is human information behaviour, and more specifically, whether principles derived from the Slow Movement have anything to offer the study and practice of information management in contemporary overloaded society.

Academic literature relating to information behaviour was reviewed, with a focus on the role of theory and theorising within the discipline. Some existing models of information behaviour were introduced. Attention then turned to the related areas of information literacy and information pathologies, and how these areas interact. Existing suggestions for the alleviation of overload were also introduced.

Slow principles were reviewed in light of the above, as an antidote to speed and excess through the mindful and critical perception of the appropriateness of choice. Specific attention was paid to the key areas of time and consumption and how they have been addressed and conceptualised in relation to information or, in the case of consumption, media use.

The next chapter is an extended exercise in conceptual thinking, using the background developed here as a foundation. The intention of this conceptual work is to position this project against that background, and within a broader social and cultural context.

1.5 Chapter One references

Addis, M. (2005) ‘New technologies and cultural consumption - edutainment is born!’, *European Journal of Marketing,* 39 (7/8), pp. 729-736.

Bates, M.J. (2005) ‘An introduction to metatheories, theories, and models’ in Fisher, K.E., Erdelez S. & McKechnie, L.E.F. (eds) *Theories of information behavior*. Medford, NJ: published for the American Society for Information Science & Technology by Information Today, pp. 1-24.

Bawden, D. (2006) ‘Users, user studies and human information behaviour: a three-decade perspective on Tom Wilson's 'On user studies and information needs'', *Journal of Documentation,* 62 (6), pp. 671-679.

Bawden, D. (2001) ‘The shifting terminologies of information’, *Aslib Proceedings,* 53 (3), pp. 93-98.

Bawden, D. & Robinson, L. (2008) ‘The dark side of information: overload, anxiety and other paradoxes & pathologies’, *Journal of Information Science,* 35 (2), pp. 180-191.

Beer, D. & Burrows, R. (2010) ‘Consumption, prosumption and participatory web cultures: an introduction’, *Journal of Consumer Culture*, 10 (1), pp. 3-12.

Biggs, M. (1989) ‘Information overload and information seekers: what we know about them, what to do about them’, *Reference Librarian,* 11 (25/26), pp. 411-429.

Boddy, J., Neumann, T., Jennings, S., Morrow, V., Alderson, P., Rees, R. & Gibson, W. (2012) ‘Building ethics into the research design’ in *The research ethics guidebook: a resource for social scientists* [online]. Available: http://www.ethicsguidebook.ac.uk/Building-ethics-into-the-research-design-8 (Accessed 22 June 2012).

Brouwer, P. S. (1997) ‘Critical thinking in the information age’, *Journal of Educational Technology*, 25 (2), pp. 189-197.

Buckland, M. (1991) ‘Information as thing’, *Journal of the American Society for Information Science,* 42 (5), pp. 351-360.

Campbell, C. (2005) ‘The Craft Consumer: culture, craft and consumption in a postmodern society’, *Journal of Consumer Culture,* 5 (1), pp. 23-42.

Carey, R., McKechnie, L.E.F. & McKenzie, P. (2001) ‘Gaining access to everyday life information seeking’, *Library & Information Science Research,* 23 (4), pp. 319-334.

Case, D.O. (2007) *Looking for information: a survey of research on information seeking, needs, and behavior*. 2nd edn. London: Academic Press.

Chan, S.Y. (2001) ‘The use of graphs as decision aids in relation to information overload and managerial decision quality’, *Journal of Information Science,* 27 (6), pp. 417-426.

Charmaz, K. (2006) *Constructing grounded theory: a practical guide through qualitative data analysis*. London: Sage.

CittaSlow UK (2012) *Towns*. Available at: http://www.cittaslow.org.uk/towns/ (Accessed: 22 June 2012).

Cohen, S. & Rutsky, R.L. (2005) *Consumption in an age of information*. Oxford: Berg.

Couldry, N., Livingstone, S. & Markham, T. (2007) ‘'Public connection' and the uncertain norms of media consumption’ in Soper K. & Trentmann, F. (eds) *Citizenship and consumption*. Basingstoke: Palgrave Macmillan, pp. 104-120.

Deacon, D. (2003) ‘Holism, communion and conversion: integrating media consumption and production research’, *Media, Culture & Society,* 25 (2) pp. 209-231.

Dervin, B. (1999) ‘On studying information seeking methodologically: the implications of connecting metatheory to method’, *Information Processing & Management*, 35 (6) pp. 727-750.

Dervin, B. (1997) ‘Given a context by any other name: methodological tools for taming the unruly beast’, *Proceedings of an international conference on research in information needs, seeking & use in different contexts (ISIC).* Tampere, 14-16 August 1996. London: Taylor Graham, pp. 13-38.

Dervin, B. (1994) ‘Information-democracy: an examination of underlying assumptions’, *Journal of the American Society for Information Science*, 45 (6), pp. 369-385.

Dervin, B. (1983) ‘An overview of sense-making research: concepts, methods, and results to date’, *International Communication Association Annual Meeting.* Dallas, TX, May 1983. Washington, DC: International Communications Association.

Edmunds, A. & Morris, E. (2000) ‘The problem of information overload in business organisations: a review of the literature’, *International Journal of Information Management,* 20 (1), pp. 17-28.

Ellis, D. (1989) ‘A behavioural approach to information retrieval system design’, *Journal of Documentation,* 45 (3), pp. 171-212.

Eppler, M.J. & Mengis, J. (2004) ‘The concept of information overload: a review of literature from organization science, accounting, marketing, MIS, and related disciplines’, *Information Society, The,* 20 (5), pp. 325-344.

Eriksen, T.H. (2001) *Tyranny of the moment: slow and fast time in the information age*. London: Pluto Press.

Fisher, K.E., Erdelez S. & McKechnie, L.E.F. (eds) (2005) *Theories of information behavior*. Medford, NJ: published for the American Society for Information Science & Technology by Information Today.

Gabriel, Y. & Lang, T. (1995) *The unmanageable consumer*. London: Sage.

Gleick, J. (1999) *Faster: the acceleration of just about* everything. London: Abacus.

Habermas, J. (1989) *The structural transformation of the public sphere: an inquiry into*

a category of bourgeois society. Trans. T. Burger & F. Lawrence. Cambridge: Polity.

Hartel, J. (2006) 'Information activities and resources in an episode of gourmet cooking', *Information Research* [online], 12 (1). Available: http://informationr.net/ir/12-1/paper282.html (Accessed: 22 June 2012).

Hartel, J. (2003) 'The serious leisure frontier in Library & Information Science: hobby domains', *Knowledge Organization,* 30 (3/4), pp. 228-238.

Hensiak, K. (2003) 'Too much of a good thing: information overload & law librarians', *Legal Reference Services Quarterly,* 22 (2/3) pp. 85-98.

Herman, E. & Nicholas, D. (2010) 'The information enfranchisement of the digital consumer', *Aslib Proceedings,* 62 (3), pp. 245-260.

Hersh, W. (2009) 'A stimulus to define informatics and health information technology', *BMC Medical Informatics and Decision Making* [online], 9 (24). Available: http://www.biomedcentral.com/1472-6947/9/24 (Accessed: 22 June 2012).

Hjørland, B. (2005) 'Library and information science and the philosophy of science', *Journal of Documentation,* 61 (1) pp. 5-10.

Hjørland, B. (1998) 'Theory and metatheory of information science: a new interpretation', *Journal of Documentation,* 54 (5), pp. 606-621.

Honoré, C. (2004) *In Praise of Slow: how a worldwide movement is challenging the cult of speed*. London: Orion.

Hopkins, R.L. (1995) 'Countering information overload: the role of the librarian', *Reference Librarian,* 23 (49/50), pp. 305-333.

Huotari, M.L. & Chatman, E. (2001) 'Using everyday life information seeking to explain organizational behavior', *Library & Information Science Research,* 23 (4), pp. 351-366.

Ingham, J. (2003) 'E-mail overload in the UK workplace', *Aslib Proceedings,*

55 (3), pp. 166-180.

Ingwersen, P. & Jarvelin, K. (2005) *The Turn: integration of information seeking and retrieval in context.* Dordrecht: Springer.

Järvelin, K. & Vakkari, P. (1993) 'The evolution of library and information science 1965-1985: a content analysis of journal articles', *Information Processing & Management,* 29 (1), pp. 129-144.

Johnston, B. & Webber, S. (2008) 'Information literacy in Higher Education: a review and case study', *Studies in Higher Education*, 28 (3), pp. 335-352.

Jones, B. (1998) 'Customers are consumers of library resources - or are they?', *Australian Library Journal,* 47 (2), pp. 131-144.

Journal of Documentation: LIS and the philosophy of science (2005), 61 (1).

Kari, J. & Hartel, J. (2007) 'Information and higher things in life: addressing the pleasurable and the profound in information science', *Journal of the American Society for Information Science & Technology,* 58 (8) pp. 1131-1147.

Kellerman, A. (2000) 'Where does it happen? The location of the production & consumption of web information', *Journal of Urban Technology,* 7 (1), pp. 45-61.

Kim, B. (2001) 'Social constructivism' in Orey, M. (ed.) *Emerging perspectives on learning, teaching, and technology* [online]. Available: http://www.coe.uga.edu/epltt/SocialConstructivism.htm (Accessed: 22 June 2012).

Knorr Cetina, K. (2010) 'The epistemics of information: a consumption model', *Journal of Consumer Culture,* 10 (2), pp. 171-201.

Kolomiets, V.P. (2011) 'The Media Environment and Media Consumption in Contemporary Russian Society', *Sociological Research,* 50 (1), pp. 44-57.

Kuhlthau, C.C. (2004) *Seeking meaning: a process approach to library and information services*. 2nd edn. Michigan: Libraries Unlimited.

Kuhlthau, C.C. (1991) ‘Inside the search process: information seeking from the user’s perspective’, *Journal of the American Society for Information Science*, 42 (5), pp. 361-371.

Kwon, N. (2007) ‘Critical thinking disposition and library anxiety: a mixed methods investigation’ in Nahl, D. & Bilal, D. (eds) *Information and emotion: the emergent affective paradigm in information behaviour research and theory*. Medford, NJ: published for the American Society for Information Science & Technology by Information Today, pp. 235-242.

McKenzie, P. (2003) ‘A model of information practices in accounts of everyday-life information seeking’, *Journal of Documentation,* 59 (1), pp. 19-40.

Melgoza, P., Mennel, P.A. & Gyeszly, S.D. (2002) ‘Information overload’, *Collection Building,* 21 (1), pp. 32-42.

Messner, C. & Wänke, M. (2011) ‘Unconscious information processing reduces information overload and increases product satisfaction’, *Journal of Consumer Psychology,* 21 (1), pp. 9-13.

Miedema, J. (2009) *Slow reading*. Dultuth, MN: Litwin.

Miller, I. R. (2010) ‘Turning the table: a faculty-centred approach to integrating information literacy’, *Reference Services Review*, 38 (4), pp. 647-662.

Miller, R., O’Donnell, E., Pomea, N., Rawson, J., Shepard, R. & Thomes, C. (2010) ‘Library-led faculty workshops: helping distance educators meet information literacy goals in the classroom’, *Journal of Library Administration*, 50 (7/8), pp. 830-856.

Mutch, A. (1997) ‘Information literacy: an exploration’, *International Journal of Information Management*, 17 (5), pp. 377-386.

Naish, J. (2009) *Enough: breaking free from the world of excess*. London: Hodder & Stoughton.

Nicholas, D., Huntington, P., Williams, P. & Dobrowolski, T. (2006) ‘The digital

information consumer' in Spink, A. & Cole, C. (eds) *New directions in human information behaviour*. London: Springer, pp. 203-228.

Nicholas, D., Dobrowolski, T., Withey, R., Russell, C., Huntington, P. & Williams, P. (2003) 'Digital information consumers, players and purchasers: information seeking behaviour in the new digital interactive environment', *Aslib Proceedings,* 55 (1/2), pp. 23-31.

Oakleaf, M., Millet, M. S. & Kraus, L. (2011) 'All together now: getting faculty, Administrators, and staff engaged in information literacy assessment', *Portal: Libraries and the Academy*, 11 (3), pp. 831-852.

O'Connor, L. (2009) 'Information literacy as professional legitimation: the quest for professional jurisdiction', Library Review, 58 (4), pp. 272-289.

Open University (2012) *Welcome to Safari*. Available at: http://www.open.ac.uk/safari/ (Accessed: 22 June 2012).

Owens, M. R. (1991) *Towards an information literate society*. Jefferson, NC: McFarland.

Oxbrow, N. (1998) 'Information literacy – the final key to an information society', *Electronic Library*, 16 (6), pp. 359-360.

Parkins, W. & Craig, G. (2006) *Slow Living*. Oxford: Berg.

Petrini, C. & Padovani, G. (2006) *Slow Food Revolution: a new culture for eating & living.* New York, NY: Rizzoli International.

Pettigrew, K. & McKechnie, L. (2001) 'The use of theory in information science research', *Journal of the American Society for Information Science,* 52 (1), pp. 62-73.

Portinari, F. (1989) *The Slow Food Manifesto*. Available: http://www.slowfood.com/about_us/eng/manifesto.lasso (Accessed: 22 June 2012)

Quinn Patton, M. (2002) *Qualitative research & evaluation methods*. 3rd edn.

London: Sage.

Ritzer, G. & Jurgensen, N. (2010) ‘Production, consumption, prosumption: the nature of capitalism in the age of the digital 'prosumer'‘, *Journal of Consumer Culture,* 10 (1), pp. 13-36.

Rooney-Browne, C. & McMenemy, D. (2010) ‘Public libraries as impartial spaces in a consumer society: possible, plausible, desirable?’, *New Library World,* 111 (11/12), pp. 455-467.

Rudd, M.J. & Rudd, J. (1986) ‘The impact of the information explosion on library users: overload or opportunity?’, *Journal of Academic Librarianship,* 12 (5), pp. 304-307.

Rutsky, R. (2002) ‘Pop-up theory: distraction & consumption in the age of meta-information’, *Journal of Visual Culture,* 1 (3), pp. 279-294.

Sasaki, T.D., Becker, D.V., Janssen, M.A. & Neel, R. (2011) ‘Does greater product information actually inform consumer decisions? The relationship between product information quantity and diversity of consumer decisions’, *Journal of Economic Psychology,* 32 (3), pp. 391-398.

Sassatelli, R. & Davolio, F. (2010) ‘Consumption, pleasure and politics: Slow Food and the politico-aesthetic problematization of food’, *Journal of Consumer Culture,* 10 (2), pp. 202-232.

Savolainen, R. (2007) ‘Filtering and withdrawing: strategies for coping with information overload in everyday contexts’, *Journal of Information Science,* 33 (5), pp. 611-621.

Savolainen, R. (2006) ‘Time as a context of information seeking’, *Library and Information Science Research*, 28 (1), pp. 110-127.

Savolainen, R. (2005) ‘Everyday life information seeking’ in Fisher, K.E., Erdelez S. & McKechnie, L.E.F. (eds) *Theories of information behavior*. Medford, NJ: published for the American Society for Information Science & Technology by Information Today, pp. 143-148.

Savolainen, R. (1995) ‘Everyday life information seeking: approaching information seeking in the context of 'way of life'', *Library & Information Science Research,* 17 (3), pp. 259-294.

Schor, J. (1999) ‘The new politics of consumption: why Americans want so much more than they need’, *Boston Review, The,* Summer, pp. 1-8.

Schwartz, B. (2004) *The paradox of choice: why more is less*. London: Harper Collins.

Seale, C., Gobo, G., Gubrium, J.F. & Silverman, D. (2007) *Qualitative research practice*. London: Sage.

Shenton, A. K. & Hay-Gibson, N. V. (2011) ‘Information behaviour and information literacy: the ultimate in transdisciplinary phenomena?’, *Journal of Librarianship and Information Science*, 43 (3), pp. 166-175.

Shields, R. (1992) ‘The individual, consumption cultures and the fate of community’ in Shields, R. (ed.) *Lifestyle shopping: the subject of consumption*. London: Routledge, pp. 99-114.

Sicilia, M. & Ruiz, S. (2010) ‘The effects of the amount of information on cognitive responses in online purchasing tasks’, *Electronic Commerce Research and Applications,* 9 (2), pp. 183-191.

Singh, D.P. & Punjabi, B. (2011) ‘Media consumption and information usage in India’, *Singapore Management Review,* 33 (1), pp. 111-126.

Skogerbø, E. & Syvertsen, T. (2004) ‘Towards an information society? The value of media production and consumption’, *Public, The,* 11 (1), pp. 45-60.

Slow Food (2012a) *About us*. Available: http://www.slowfood.com/international/1/about-us (Accessed: 22 June 2012).

Slow Food (2012b), *Biodiversity*. Available: http://www.slowfood.com/international/11/biodiversity (Accessed: 22 June 2012).

Slow Movement (2012a) *The Slow Movement: making a connection*. Available: http://www.slowmovement.com/ (Accessed: 22 June 2012).

Slow Movement (2012b) *Slow cities and the slow movement*. Available: http://www.slowmovement.com/slow_cities.php (Accessed: 22 June 2012).

Spink, A. & Cole, C. (2001) 'Introduction to the special issue: everyday life information-seeking research', *Library & Information Science Research,* 23 (4), pp. 301-304.

Stebbins, R.A. (2009) 'Leisure and its relationship to library and information science: bridging the gap', *Library Trends,* 57 (4), pp. 618-631.

Strelitz, L.N. (2002) 'Media consumption and identity formation: the case of the 'homeland' viewers', *Media Culture & Society,* 24 (4), pp. 459-480.

Talja, S., Tuominen, K. & Savolainen, R. (2005) 'Isms in information science: constructivism, collectivism & constructionism', *Journal of Documentation,* 61 (1), pp. 79-101.

Thomson, L. & Laing, A.W. (2003) 'The Net Generation: children, the internet and family purchasing', *Journal of Marketing Management,* 19 (4), pp. 491-512.

Tidline, T. (1999) 'The mythology of information overload', *Library Trends,* 47 (3), pp. 485-506.

Tomlinson, J. (2007) *The culture of speed: the coming of immediacy*. London: Sage.

University of Gastronomic Sciences (2012) *History and mission*. Available: http://www.unisg.it/en/storia-e-missione/ (Accessed: 22 June 2012)

Wilson, T.D. (2006a) 'On user studies and information needs', *Journal of Documentation,* 62, 6, pp. 658-670.

Wilson, T.D. (2006b) 'Revisiting user studies and information needs', *Journal of Documentation,* 62, 6, pp. 680-684.

Wilson, T.D. (1999) 'Models in information behaviour research', *Journal of*

Documentation, 55, 3, pp. 249-270.

Wilson, T.D. (1996) 'Information behaviour: an interdisciplinary perspective', *Information Processing & Management*, 33 (5), pp. 551-572.

Withey, R. (2003) '(Mis)understanding the digital media revolution', *Aslib Proceedings,* 55 (1/2), pp. 18-22.

World Institute of Slowness (2011) *About us*. Available: http://www.theworldinstituteofslowness.com/aboutus (Accessed: 22 June 2012).

Wurman, R.S. (2001) *Information anxiety 2,* Indianapolis, IN: Que.

1.5.1 Newspaper references

Alibhai-Brown, Y. (2008) My two children, divided by classroom fads. Evening Standard, 11 December.

Allen, K. (2008) Cutting a path through the media jungle: Businesses that sift and sort through the media are thriving as PRs, journalists, and the people who read them, struggle with information overload. The Guardian: Media, 11 February.

Ashworth, A. & Seib, C. (2003) The peril of pension information overload. The Times: Money, 29 November.

Bateson, L. (2000a) The 'feelgood' offices. The Daily Mail, 10 February.

Bateson, L. (2000b) Master the dark arts of email and prosper. The Daily Mail, 29 June.

Bisson, S. (2003) Information overload: Simon Bisson explains how we can deal with the billions of gigabytes of data created around the world. The Guardian: Life, 29 May.

Bisson, S. (2005) Information underload: As businesses find it increasingly hard to manage their data effectively, Simon Bisson examines cost-conscious storage solutions. The Guardian: Life, 9 June.

Bray, P. (2001) The future of work: our survey results. The Sunday Times, 29 April.

Bunting, M. (2007) Eat, drink & be miserable: The true cost of our addiction to shopping. The Guardian, 3 December.

Bunting, M. (2011) Our crisis is not about trust. It’s that we no longer discuss our basic values. The Guardian, 25 July.

Burkeman, O. (2001) Post modern: It was billed as instant, democratic and cheap, and it was going to revolutionise the way we communicated. But less than a decade after it became widely available, email is losing its lustre. Many of us

are complaining of information overload, and companies are grappling with a proliferation of pointless communication. The Guardian, 20 June.

Burkeman, O. (2009) This column will change your life: We're all too busy, says Oliver Burkeman, but is it just an excuse? The Guardian: Weekend, 7 March.

Burkeman, O. (2011a) This column will change your life: Spam filter working? So why are you still deluged? The Guardian: Weekend, 9 April.

Burkeman, O. (2011b) Abandon your resolutions: stop looking for your soulmate: reject positive thinking: Oliver Burkeman kicks of our new year issue with advice on how to be a better person in 2011 (and it's not what you think). The Guardian: Weekend, 1 January.

Cartner-Morley, J. (2009) Life at a snail's pace. The Guardian: G2, 15 April.

Cavendish, C. (2005) Goodbye, Blackberry way. The Times, 4 August.

Chalk, N. (2010) Excessive road signs are a distraction and a danger to motorists. The Express, 5 April.

Chapman, J. (2011) Simpler signs ahead. The Daily Mail, 6 January.

Davidovitz, G. & Levitte, M. (2010) Future of journalism: our money is on the value of credibility. The Guardian: Media, 12 April.

Day, E. (2009) How the tyranny of email keeps us in touch – but drives us all apart. The Observer, 1 November.

Doyle, C. (2004) How to keep the brain ticking over. Many people long for a good memory - but how does one go about achieving it? The Daily Telegraph, 20 April.

Doyle, E. & Schofield, J. (2005) Underloaded. The Guardian: Life, 26 May.

Drayton, H. (2000) Personal view. The Daily Telegraph, 14 November.

Evans, H. (2011) How far can the press go in the public interest? The Times, 27

September.

Evans, M. (2010) How the net is wrecking the brains of teenagers. The Daily Telegraph, 11 February.

Farmelo, G. (2003) Information overload: Graham Farmelo gets to grips with the new language of science: Information: The new language of science by Hans Christian on Baeyer. The Guardian: Weekend, 15 November.

Gomes, J. (2000) Blinded by the light in an online overload: Jean Gomes analyses the downside of the IT revolution and warns that we may be drowning in information while failing to see perils ahead. The Guardian: Jobs & Money, 15 July.

Guarente, M. (2000a) Listening for calls on the trading floor. Sunday Business, 6 February.

Guarente, M. (2000b) Spoilt by too much choice. Sunday Business, 3 December.

Hainsworth, K. (2003) All a matter of facts: Wondering how to handle information overload? Karen Hainsworth processes seven answers. The Guardian: Rise, 15 February.

Hamilton, F. (2009) Let's relax, say campaigners who will give speeding tickets to London's pedestrians. The Times, 14 April.

Haywood, L. (2011) Why your smartphone may be making you sad. The Sun, 22 December.

Hoare, S. (2000) E-mail turns up pressure level for managers. The Times, 3 October.

Jackson, E. (2001) Keep up to date through the right information package. Sunday Telegraph, 14 January.

Jackson, M. (2008) Information overload: Switch off your mobile. Unplug your iPod. And stop checking those emails! The Daily Mail, 31 July.

Johnson, B. (2005) Can't keep yourself organised with Post-It notes and calendars? Bobbie Johnson reveals the technology you need to get sorted. The Guardian: Life, 6 January.

Keegan, V. (2000) Second sight: The next stage in information overload is coming to a mobile phone near you any moment now. The Guardian: Online, 19 October.

Keegan, V. (2002) Second sight: Erasing the information age. The Guardian: Online, 10 January.

Kelly, L. (2011) I realise that…. The Sun, 4 June.

Kendall, P. (2000) E-mail overload leaves workers coping with 191 messages a day. The Daily Mail, 23 June.

Kinchen, R. (2011) Think outside the box and delete the lot; the IT worker who gave up email in 2008. The Sunday Times, 18 December.

Leith, W. (2009) Sleepless? Stressed? Anxious? Exhausted? Relentless consumption, spiralling debt, information overload. Is modern life making you ill? The Observer: Magazine, 12 July.

Linklater, M. (2003) Information overload: The real threat to history is just a mouseclick away. The Times, 23 July

MacErlean, N. (2000) Are you suffering from PMS (Post Mail Syndrome)?: An unruly inbox is a major cause of stress and waster time. The Observer: Business, 18 June.

Malbon, T. (2010) Is the web bad for society? No, just look at the good that Zopa and Kiva are doing. The Daily Telegraph, 1 April.

Mannion, J. (2002) Information overload bogging you down? The Times, 16 March.

Margolis, J. (2009) iPhone mania! The Daily Mail, 30 September.

Mesure, S. (2009) New mothers shun the NHS and log on to swap baby tips; few

new mothers trust official advice on childrearing, and they're turning to chatrooms and family for help. The Independent on Sunday, 11 October.

Midgley, C. (2008) I know you won't have time to read this, but…The Times, 30 July.

Moody, A. (2000) Are you becoming a slave to your e-mail? Mail on Sunday, 27 August.

Naish, J. (2004) Info-besity epidemic. The Times, 3 April.

Naish, J. (2011) Should you be taking a memory pill? The Daily Mail, 1 March.

Nightingale, J. (2005) Digital curators wage war on terrabytes: As information overload makes meaningful data storage more difficult, a fledgling research centre aims to bring order out of chaos. The Guardian: Education, 10 January.

Nightingale, J. (2006) Digging for data that can change our world: Research tools able to swiftly analyse masses of data could soon bring about advances that scientists up to now can only dream of. The Guardian: Education, 15 November.

Nisse, J. (2002) Information overload: Executives are being bombarded with data, and a new lexicon is defining them by how they deal with it. Independent on Sunday: Business, 17 March.

Norton, C. & Nathan, A. (2001) Computer-mad generation has a memory crash. Sunday Times: Home, 4 February.

Oaff, B. (2000) How to...cope with information overload: Honing your data handling skills. The Guardian: Rise, 1 July.

Partridge, C. (2003) Can you trust your e-mail? The Times, 23 January.

Pendle, G. (2000) The new arrangers. The Times, 24 May.

Rowan, D. (2002) Thanks for the memory. The Times: Times2, 26 November.

Rushe, D. (2011) Revealed: world’s most influential users of Twitter and Facebook: Justin Bieber beats Barack Obama as a new social media site computes pings, tweets and hits to rank opinion formers. The Observer, 2 January.

Schofield, J. (2006) A sharp increase in the value of paying attention. The Guardian: Technology, 9 February.

Soderblom, A. (2000) Stresses of modern working. The Times, 16 October.

Sullivan, D. (2000) Hunt for the ideal search engine: Suffering from information overload? Danny Sullivan, a search engine guru, has some top tips: speciality search engines. The Guardian: Online, 27 July.

Tagg, L. (2004) The high-tech life: Can you keep up with IT? The Times: Crème, 12 May.

Tobin, L. (2011) Now, where were we? Has your Blackberry taken over your life, or your iPhone? Academics are trying to find a way to help. The Guardian: Education, 15 February.

Vickers, A. (2004) One in five reveals: I can't live in digital Britain. The Express, 26 July.

Wighton, D. (2011) The shipping forecast means yet more trouble for Lloyds. The Times: Business, 26 February.

Williams, Z. (2011) Revolutions, earthquakes, financial meltdowns, political scandals, famines and killings – the shattering headlines just keep coming this year. The Guardian: G2, 26 July.

2. Chapter Two
Conceptual foundations

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Conceptual foundations

2.1 Introduction

In Chapter One, the research background of the project and the nexus of issues it explores were developed. The sub-field of LIS concerned with human information behaviour (HIB) was explained, some models introduced and the importance of theorising within that field was outlined. Elements of information behaviour were then explored in the context of accelerative speed and increasing scale, namely information literacy and information pathologies. The Slow Movement was established as a current and increasingly popular means of managing overload in this context, and its relation to information was also considered.

This chapter aims to outline a broader conceptual perspective in which Slow and information can be brought closer together. This applies to both a disciplinary view (where Slow might sit within LIS and HIB), and a practical view (where Slow might sit as a behavioural approach to information use). Both areas are here treated hypothetically, and will be explored in more detail in subsequent chapters (the Delphi study will explore disciplinary views, and the focus group will look at real-world examples). The purpose is not to present a model to be tested, but to describe the theoretical underpinnings of Slow information behaviour. In so doing, a conceptual picture of the contemporary social condition will emerge.

The conceptual perspective is presented as a three-layered diagram (Figure 2, p. 84). The key assumption is that information has attained a role of central social and cultural significance. This significance is established through analysis of various theories of the Information Society, and is represented by the enveloping nature of Layer A. How information is conceptualised within that society is the subject of Layer B, and the work of Raymond Williams is used to explore this. The notion of the human element at the centre of information behaviour is at the heart of the diagram, and is explored through a variety of existing conceptions.

Figure 2, then, illustrates the conceptual layers which underpin this research. The layers move from a general view of the Information Society as ‘information

culture', through the flow of information as knowledge communication within that culture, towards the information behaviour (or practices) of individuals as communicators. Slow principles may be exhibited within that information related behaviour, and that possibility is explored in subsequent chapters.

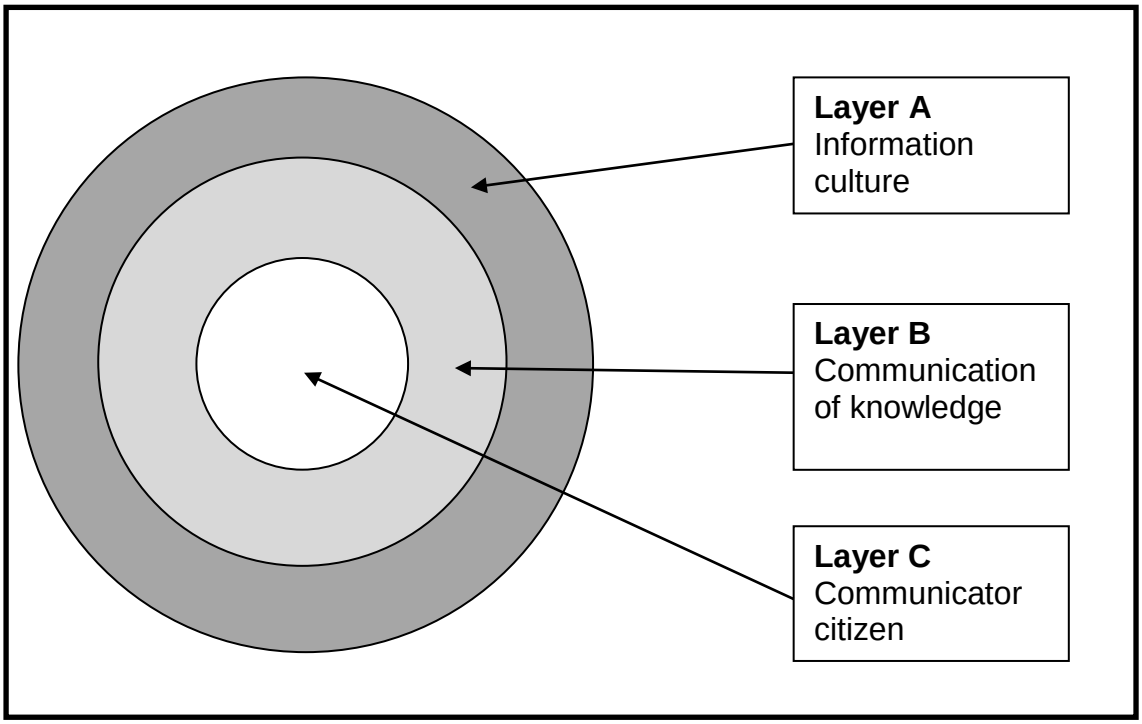

Figure 2: The conceptual framework

2.2 Layer A: information culture

This section will clarify layer A which corresponds to how this research views the Information Society, and why 'culture' may be a more appropriate description for a constructivist approach.

2.2.1 The Information Society

The ways in which writers have argued the existence of the Information Society is met with some scepticism by Frank Webster in his *Theories of the Information Society* (2006). Nevertheless, as a term it is "valuable in exploring features of the contemporary world" (Webster, 2006, p. 21), and so it provides a useful point of conceptual departure. The scepticism does not relate, it should be said, to the *existence* of the Information Society, but to the arguments used to support it. We take the Information Society to exist, we are simply unsure as to how to prove it. A summary of these different arguments now follows, as laid out by Webster, and the concept is developed further to include Raymond Williams' ideas about culture and communication, which emphasise the constructivist approach of this research.

2.2.2 Definitional groups

Webster identifies six theoretical groups into which literature regarding the emergence of the Information Society can be separated. These groups are by no means mutually exclusive and the separation should not be viewed as stark or inflexible, but by isolating the defining aspects of each group Webster is able to compare the quantitative or qualitative notions which underlie the conceptions at work. By associating this project with one or, as will be shown, several of these groups, its scope is defined, its underlying perspective is clarified and, ultimately, its qualitative grounding is consolidated.

Webster's groups are reviewed in summary, and other literature is included where pertinent. Connections to this project's conceptualisation of the Information Society will be teased out as the section progresses. This summary takes the groups in the order they appear in much of Webster's work (Webster, 2004; Webster, 2006): technological, economic, occupational, spatial, cultural. These first five definitions hinge on the idea that more information exists now than in any previous time, although they identify this proliferation in different ways.

This order is not a random sequence, running as it does from the largely quantitative approach of theories with a technological focus to the qualitative nature of culturally inspired perspectives. The sixth definitional group differs because it takes the *character* of information as its crux and suggests that "theoretical knowledge/information is at the core of how we conduct ourselves these days" (Webster, 2006, p. 9, original emphasis). As Webster says, this last group is "singularly qualitative" and as such, completes the quantitative-qualitative spectrum of how the groups are presented.

- *Technological*

Technological developments underpin the first of Webster's analytical definitions, and are arguably the most common factor outlined in discussions on the emergence of an Information Society. The very rapid growth of affordable, accessible technologies has enabled the dissemination of information on an unprecedented scale. The internet, as a communications technology, permeates the everyday to such a degree that it is now considered by many to be the normal, preferred mode of information exchange. This blanket eruption of information technology into every layer of daily life is considered emblematic "of a new kind of society emergent on a revolutionary mix of electronics and telecommunications technologies" (Martin, 1988, p.38). The popularity of the technological definition is based on the quantifiable nature of a scientific discourse, as well as the popularity of technology itself. The predominance of information is made possible by the predominance of technology.

There are problems with this definition, in relation to theorising about the Information Society generally, as Webster points out, and in relation to this

research in particular. Webster sees a fundamental shakiness in the quantitative aspects of this group which purport to measure the increase of information by measuring the increase in information technologies. The shakiness stems from uncertainty about which ICTs are measured, how different ICTs can be compared or synthesised and at what point enough ICTs exist to constitute an Information Society (Webster, 2006, p. 11). Further concerns stem from the use of these quantitative measures (for example, the number of networked PCs) to denote the qualitative change represented by the emergent Information Society (ibid., p. 21). Webster also questions the primacy of technology in this particular perspective because it represents "an oversimplification of processes of change" and "relegates into an entirely separate division social, economic and political dimensions of technological innovation" (ibid., p. 12).

The reasons for avoiding a purely technological definition of the Information Society in this research echo Webster's concerns, in addition to the simple fact that the project's focus is not technology. The impact and power of ICTs is acknowledged, but the point remains that technology is a social product of innovation and not a determining factor of social development. Clearly, when considering the impact of speed and choice in a consumerist environment, ICTs play a vital role, but that role is assumed to be as socially constructed as the technology itself. ICTs can therefore be subsumed into other perceptions of the Information Society, for example the cultural group. The processing speed of computers and the very technical aspects of information communication are not within the scope of this project and, as such, this quantitative systems-centric approach to interpreting the Information Society is of only indirect importance.

- *Economic*

Put simply, this group of theories about the Information Society identifies the increasing economic value of informational activities (Webster, 2006) but not, Webster implies by omission, the increase in economic worth of information objects themselves. This commodification of information is, perhaps, a by-product of the Information Society rather than an underlying driver, and it is an idea which will return in later sections. The economic view of the Information Society postulates that "information is…a commodity language" (Morse, 1997,

p. 87), and quantifies the Society's existence in terms of informational economic activity in direct contrast to agriculture or industry. Webster highlights as central to this perspective work by Fritz Machlup (e.g. 1962), later developed by Marc Porat (e.g. 1977), and their identification of distinct information industries.

Webster's concerns with the purely economic view of the Information Society again refer to the quantitative / qualitative discord of the approach. Whilst acknowledging the scope of Machlup and Porat's work, the drive to incorporate disparate industries as informational activities appears to skew the reality of those activities. "The 'construction of information buildings'" is one example used (Webster, 2006, p.13). This generous classification exaggerates the existence and economic value of such industries, and reveals the value judgments that influence the inclusion or exclusion of certain spheres. These two factors combine to render the quantitative foundations of this approach somewhat unstable. Further, as with the technological group, quantitative measures are being used to illustrate a qualitatively experienced phenomenon, namely the Information Society.

The economic perspective was unlikely to demonstrate strong connections to a Slow perspective for the reason that economics in this sense are not a primary focus. The quantitative emphasis within this group fails to capture the socially experienced (and constructed) aspects of information communication which must be underlined in a framework at whose core lies personal information behaviour. As with technology, the importance of the rise in economic value of information is acknowledged, but it is a sideline to, and may also be subsumed by, the central notion of an information or knowledge culture. Nevertheless, consumerist economics do play a role in the formulation of a Slow framework.

- *Occupational*

Where the previous group concentrates on the increasing economic worth of information activities, the occupational group concentrates on the increasing numbers of people engaged in those activities. The Information Society can be said to exist because "the preponderance of occupations is found in information work" (Webster, 2006, p. 14). Webster asserts that Daniel Bell's Post-Industrial Society has been achieved revolves via this same idea. As the argument of

choice for sociologists, the occupational approach rivals the technological perspective in its popularity, perhaps because it differs from it on a fundamental level. “A focus on occupational change is one which stresses the transformative power of information itself rather than that of technologies” (ibid., p. 15). This approach also acknowledges the position of power occupied by those who occupationally create and disseminate information, these power relations forming the basis of Manuel Castells’ mode of societal development, informationalism (Castells, 2000, p. 14).

Webster identifies the most questionable aspect of this approach as being that it relies on similar judgments to the economic group about what to include as ‘information work’ (Webster, 2006, p. 15). How an occupation is divided between informational and non-informational activity is inexact and largely subjective, and how much informational work a role must include to be deemed wholly informational is not clear. The quantitative support of qualitative change is once more questioned and the loss of nuance in social hierarchies bemoaned.

Again, a basic issue with aligning a Slow perception of the Information Society with the occupational group is that the structures and changes to which, for example, Daniel Bell refers, are not a central concern of this research. Occupational change is of interest but in relation to how it demonstrates a broader informational culture, not in how the changes themselves may or may not ‘prove’ that the Information Society exists.

- *Spatial*

The approach of this definitional group is to emphasise the proliferation of connections between locations as evidence of the Information Society (Webster, 2006, p. 17). People are increasingly plugged in to any number of these information networks, and as such networks are increasingly important features of the structure of social relations, in both private and public spheres. The distinction between these spheres, and the relative influence of communication networks in both, is a core feature of the work of Jurgen Habermas (e.g. Habermas, 1962).

The more quantitative approaches, especially the economic group and some aspects of the occupational group, tend to collapse hierarchies and homogenise different examples of information activity in order to be able to count their frequency. The reality, however, is that the informational content of one job may not equate to that of another, although they are pooled together just the same (Webster, 2006, p. 14). The spatial approach takes quite a different angle by emphasising the variety of activity and the flows of information that are enabled through the networking of society. Ultimately, time and space are viewed differently because of these connections and the ways that they allow us to live our lives.

Webster identifies the same issues with this approach as with the previous three, and as we shall see, with the concluding two groups. It is the imprecision of definition which causes the most concern, specifically how we are to identify networks, at what level they operate and at what point their proliferation equals an Information Society. Further, Webster asks whether attention to networks is really just another technological definition or whether the flow of information is the proper focus, in which case, how should this be measured, if indeed it can be. A final criticism is that proponents of the spatial definition appear to neglect the fact that networks have existed for a very long time, albeit in reduced capacity and reach.

In relation to this research project, there are compelling concepts within this definitional group. Attention to time, space and connections are tied closely to Slow perceptions of society and the research problem at hand. The reworking of these elements that instant global connectivity allows is a fundamental driver of overload and, as such, the concerns of this group have much to offer a Slow conceptualisation. Time is accelerated, space simultaneously expanded and collapsed, connections more diverse (and more transient) than was previously possible. Nevertheless and without wishing to over-simplify this conceptual area, networks are not the defining feature of the Information Society largely because they are a technological development, as Webster also suggests. As such, they can be subsumed by social and cultural interpretations of the Information Society. However, the flow of information through these networks, between people and places, is central to this project's standpoint.

- *Cultural*

The final group to take the proliferation of information as its focus does so in an almost purely qualitative way, “rarely attempt[ing] to gauge this development in quantitative terms” (Webster, 2006, p. 20). The assertion is that more information symbols exist than ever before, and their circulation permeates our everyday lives, from the multiplication of broadcast media channels to incessant advertising to the cheap availability of clothes with which to present our personal informational message to the world. This “explosion of signification” is deemed by writers in this group as a sign itself that we live in an Information Society. This is tempered, Webster says, by the post-modernist view that the impact, meaning and permanence of signs is diminished by the increasing communication of them.

Webster is wary of assertions regarding the Information Society based on experiential observations rather than any list of criteria by which the growth of information signification can be measured: “How can we know this other than from our sense that there is more symbolic interplay going on?” (ibid., p. 21). The imprecision of definition again proves a rocky foundation for this approach, although one might argue in this qualitative group that it is precisely the mercurial ubiquity of information which denotes a society built upon it. Although it cannot be pinned down quantitatively, it is felt to relate to everything.

This definitional, or conceptual, group most closely resembles the model of the Information Society which might be thought of as Slow. It is the qualitative experience of living in a society brim-full of information that is of interest, not the number of networked PCs or what percentage of a job description qualifies as informational. The rapidity of the growth in informational output and of its communication, and the monetarily cheap nature of most of Webster’s examples (“inexpensive magazines”, “free sheets”, “junk mail”), are crucial elements of this project’s perspective.

There are, however, issues with aligning a Slow view with the specific form of cultural definition which Webster presents, most notably in its focus on post-modernist interpretations of culture. Slow may exist as a reaction to a perceived

fracturing of social structures, but that fracturing is not a terminal situation leaving no true reality to pursue. Indeed, the promotion of Slow practices (generally and informationally) may be framed as just such a pursuit. Further, whilst the post-modernist view tends to picture fundamental and systemic change, the conceptual existence of Slow information relies on a sense of continuity, of adapting pre-existing social behaviours and structures to current situations. It is also important to acknowledge that elements of overload existed in relative terms before recent times, as explored in Chapter One (1.2.3, pp. 35-36). Overload in itself is not a marker for a radically new social system (though its increase may indicate an acceleration of those elements).

- *Theoretical knowledge*

The last of Webster's groups is the approach that "a decisive qualitative change has taken place with regard to the ways in which information is used" (Webster, 2006, p. 28). Quantitative criteria are irrelevant because this approach takes the changing character of information and information use to be central, rather than the amounts of information in circulation. Webster presents Daniel Bell's work on post-industrial society as describing that, more than ever before, scientific and technological innovation stems from theoretical principles (ibid., pp. 54-55), while social and political policy (such as combating climate change) is increasingly founded on models of future likelihood. The influence of theoretical knowledge is far-reaching, to the point that "we make the world in which we live on the basis of reflection…(rather than following the dictates of nature or tradition)" (ibid., p. 30).

Webster admits that measuring the influence of theoretical knowledge is difficult to imagine though its significance has undoubtedly increased. Whilst this approach is obviously keenly felt in innovation, invention and policy making spheres, the assertion that theoretical knowledge "is now a defining feature of contemporary life" is a significant leap. The extent to which this perceived, rather than experienced, knowledge is not tied to an individual's experience of the world is debatable. With these concerns in mind, the relation of this group to a Slow conceptualisation is unclear.

2.2.2.1 Summary

In summary, Webster's first five groups provide a web of conceptual strands for how this projects perceives the Information. The sixth is, as Webster says, anomalous and its relevance of as yet unknown strength to this research.

The key points are that technology is a social product, created and used by humans in the social world. As such, global information networks are a consequence of technology which enable a different understanding of time and space to that which would be possible without them. Human economic activity drives information technology development and is affected by its growth, as commercial activity expands beyond the local sphere. Occupational trends are similarly affected, which has social and individual repercussions, as does the proliferation of cultural symbols, also enabled by network expansion.

Layer A of the framework accepts this entanglement of strands as indicative of the need for an inclusive, constructivist approach to the Information Society: it is, to some degree, all of these things and more. Taken in isolation, this statement explodes rather than focuses the conceptualisation and needs further refinement to be useful. The following section seeks to remedy this by describing the holistic approach required through an introduction to Raymond Williams' work on culture and communication. This will clarify the universality of the Information Society, why and how the phrase 'information culture' is used and how the subsequent layers of the framework fit within this view.

2.2.3 Raymond Williams & culture

Raymond Williams (1921-1988) was an academic, critic and novelist who wrote about politics, literature, drama and television, communication and culture. A committed socialist activist from the 1950s to his death, Williams was strongly influential in the rise of the New Left, although he often distanced himself from Marxist theories on the grounds that they, in relation to culture at least, were "confused" (Williams, 1993, p. 274).

There are two areas of Raymond Williams' work which clarify the perception of the Information Society which frames this research project. The first is his etymological exploration of culture, which helps clarify its use over 'society'. The second area covers his studies and writings in cultural studies, especially in relation to communication(s). This latter area is important in delineating Layer B which relates to what information is in this conceptualisation, namely the communication of knowledge and, as such, will be covered in the next section.

2.2.3.1 Etymology

In *Keywords* (1983), Williams traces the complex history of a series of words, culture itself being "one of the two or three most complicated words in the English language" (Williams, 1983, p. 87). This etymology will not be discussed in depth since the linguistic routes of modern usage is not of primary importance. However, there are a number of salient points in Williams' review of this history which illustrate the appropriateness of using culture in this context.

The earliest uses of culture were as a noun relating to the process of natural growth, to the tending of something organic, which came to be applied to the process of human and, eventually, social, development. In all later senses, the implication is that culture contrasts with mechanical activity and that it rests predominantly in human, rather than material, development. Beyond the physical sense of nurturing something organic, Williams highlights three modern uses:

1) A general process of intellectual, spiritual and aesthetic development
2) A way of life, whether of a people, a period, a group, or humanity in general
3) The works and practices of intellectual and especially artistic activity

(ibid., p. 90)

There is a danger of opting for one or other definition as "'true' or 'proper' or 'scientific'" in order to clarify concepts and Williams argues that the significance

lies in the range of meaning (ibid., p. 91). This approach shapes the Slow conceptual framework in two ways: first, the Information Society can be seen as operating along all three of the above uses and second, there is significance in viewing the *range* of definitional arguments laid out by Webster as evidence of the Information Society's construction.

This range of arguments can be joined through the notion of 'culture'. It is possible to interpret each of Webster's definitions along these lines. In so doing, all the definitions can be linked through their cultural significance, rather than segregated by their internal epistemological assumptions.

So, information technologies, both their development and what they enable, can be interpreted as a process, a work and a practice of intellectual activity (regardless of how they may then be measured). In this sense, they can be thought of as constituting 'culture'. Similarly, economic worth and occupational change may both be measured quantitatively, but the qualitative changes they represent may more usefully be appreciated as these same processes and practices of 'culture'.

Spatial arguments, as far as they can be subsumed by technology, can also be viewed in this way. Beyond networks, this group begins to foreground the second modern use of culture: "a way of life" (in developed countries at least) as lived against a modified backdrop of time and space.

Webster's cultural group adheres to all three uses, being the intellectual development, transmission and reception of information symbols, and the implication that our way of life is "manifestly more heavily information-laden than its predecessors" (Webster, 2006, p. 20). When allied with Williams' assertion that social existence is fundamentally to do with "an extraordinary, rapid and confusing expansion" of life (Williams, 1989, in Eldridge & Eldridge, 1994, p. 75), a powerful notion of the cultural significance of dynamic information flows becomes apparent.

Information culture, then, embraces all the evidence for the Information Society and in so doing, foregrounds human behaviour, experience and development.

This point will be returned to in introducing Layer C, but it is worth noting that information behaviour is taken to be the act of living, the way of life, in such a culture since much, if not all, activity is information-centric. This perception echoes that of John Tomlinson in relation to media and information technologies, that “it is not only the question of their ubiquity, their integration into pretty much every sphere of life in developed societies, it is their power to shape and perhaps even *constitute* experience” (Tomlinson, 2007, p. 96; original emphasis).

2.3 Layer B: communication of knowledge

This section will review different conceptions of information in order to tighten the building blocks of the information culture in the context of this project. Whilst the assertion remains that information culture exists *because* of the range of definitions available, and that they are all therefore relevant, some clarity is required in order to be able to pinpoint where Slow might apply. Established debate about the nature of information is summarised, the communication of knowledge highlighted and Raymond Williams' perspectives on communication, education and power introduced.

2.3.1 What is information?

The different perspectives of the Information Society (Webster, 2006) have already illustrated the difficulty in pursuing precise definitions in this field. This echoes the multiplicity of theories and models concerning information behaviour which were described earlier. This is extended, and also to some extent explained, by the range of opinion on what information itself is: different views of one necessarily result in different views of the other, which lead to different views of LIS as a discipline too (Talja et al, 2005). Indeed, the LIS discipline has a tense history with the task of defining exactly what information is. The conclusion seems to be that there can be no consensus. The term information is fundamentally too ambiguous (Buckland, 1991), probably because it has been adopted by too many disciplines (Case, 2007, p. 42), to be pinned down. Although precise definition is "not entirely necessary for the study of information phenomena to proceed" (ibid., p. 59), it is important to tighten the underlying concepts of this research.

Compulsion to track definitions down persists (Madden, 2000; Bates, 2006), undoubtedly due to the perpetually shifting landscape of information production and use (Zins, 2006; Zins, 2007) and the ways that this landscape constitutes the Information Society. Through a Delphi study, Chaim Zins explores and synthesises an array of expert opinion on the building blocks of LIS: data,

information and knowledge. This attempt to build solid foundations under the discipline indicates the fluidity with which such fundamental terms have been interpreted, and the very many other attempts to do likewise reveal information as a rich field of theoretical (and empirical) enquiry (Belkin, 1978; Boyce & Kraft, 1985; Capurro & Hjørland, 2003; Bates, 2006, and Schement, 1993, for a review of definitions).

The pursuit of definition is an ongoing and controversial quest which provides material for disciplinary debate, as well as for research. The Bates article cited above has been critiqued by Birger Hjørland over a number of years (Hjørland, 2007; Hjørland, 2009; Hjorland, 2011), with the original author publishing rejoinders (Bates, 2008; Bates, 2011). The discursive dynamism which these concepts generate illustrates the fundamental importance of paying attention to them.

Multidisciplinarity is seen to affect the struggle for definition in two key ways. Firstly, and in a largely negative way, the term information has come to mean certain things in certain fields which do not necessarily translate across disciplinary boundaries (Spang-Hanssen, 2001). This can cause confusion, though it can also act as a spur to regain control of the term through redefinition and reconceptualisation. Secondly, and more positively, whilst clarity may remain elusive or circular within the confines of information science (see above paragraph), forays into other fields can provide alternative perspectives which arguably strengthen any resulting view of the concepts involved (Bawden, 2007).

2.3.2 Typologies

In much the same way that Frank Webster grouped theories of the Information Society, Donald Case (2007, pp. 43-45) describes four key typologies in which information is classified to establish ‘families’ of definitions. Case groups loosely the typologies of Brenda Dervin and Brent Ruben, and the parallel, but not

identical, typologies of Michael Buckland and Maureen McCreadie & Ronald Rice.

The first two offer epistemological perspectives of information. Sense-Making in Dervin and social information in Ruben, are positioned as the processes and structures involved in or indicative of movement between the objective and subjective spheres in the former, and the environmental and internal spheres in the latter. As Case points out, the key difference between them is that Sense-Making is fundamentally related to the individual actor, whilst Ruben's emphasis is on the social construction of context.

The second 'pair' consider *what* is being related and are therefore more pertinent at this point. These typologies move away from the spheres of objective and subjective information, emphasising instead the differences between process and thing (Buckland), or process and representation (McCreadie & Rice). Both retain types of information which relate to knowledge. Using Case as the starting point, with additional material where relevant, these typologies present a useful means of working towards clarification of Layer B.

Buckland (1991) stresses the distinction between that which is tangible ('thing') and that which is intangible (both 'process' and whatever is perceived in the process as 'knowledge'). Importantly, information-as-knowledge cannot be measured in any way. There are three meanings (Buckland's term) of information:

- information-as-process
- information-as-knowledge
- information-as-thing

The first two are, he states, "academically respectable" whilst information-as-thing is often dismissed. The paradox of this situation is that information systems, the focus of the IR branch of information science research, "can deal directly with information *only* in this sense" (original emphasis).

Buckland asserts that information-as-thing must be studied with the same contextual attention that is extended to information-as-process. This prevents information-as-thing from becoming a mere list of objects by including the influence of human context: objects are invested with characteristics and with value by the process of using them to become informed, which brings information-as-knowledge to the foreground. This does not, however, mean that objects can only be informative when intentionally communicated, hence the latent informativeness of information-as-thing.

In the fourth typology outlined by Case, McCreadie & Rice (1998) explore information as part of a review of how access to information has been perceived and analysed. They arrive at four groupings, which Case interprets as a process-related group, plus a branching out of Buckland's information-as-thing and information-as-knowledge in to three further categories. The four groups are:

- information as commodity or resource
- information as data in the environment
- information as a representation of knowledge
- information as part of the communication process

This branching out can be further explicated as a set of overlaps, with 'thing' featuring in both the commodity and data groups, and 'knowledge' featuring in both the data group and, clearly, the representation of knowledge. The main aspects of interest and difference within this typology are, first, the introduction of *value* as represented by the inclusion of commodity or resource and, second, the explicit introduction of the *unintentional*, as seen in data in the environment.

Whilst the monetary cost of information is quantifiable (Oppenheim, 2001), its value is so context dependent that it cannot easily be predicted (Eaton & Bawden, 1991). Eaton & Bawden outline four other characteristics which further distinguish information from other kinds of resource, and which can also be seen to impact on value. These are that the exchange of information multiplies rather than diminishes its value; it is dynamic; it has no fixed or predictable life-cycle, and 'it' actually consists of very many individual forms and expressions of information.

The second aspect introduced by McCreadie & Rice which is of interest at this point is that of unintentional information, where “neither the individual nor the data intentionally engage in communication”. This type of information can be seen as simply existing, and informing simply through its existence. There are also allowances for information which is unintentionally discovered, that is, when some form of information seeking is going on, either when browsing for something else (as in McBirnie, 2008) or by proxy in encountering (as in Erdelez, 1997). This does not, however, account for information which is unsolicited, though not necessarily unwanted, but which is communicated to an individual regardless.

2.3.3 Information as the communication of knowledge

Buckland’s discussion of information-as-thing is of some relevance to this conceptual layer because it reflects the ubiquity and totality that information culture is intended to represent. This is amply achieved by the statement that “we are unable to say confidently of anything that it could not be information” (Buckland, 1991, p. 356). As Buckland points out, however, this is not particularly useful and in fact diminishes any special status that information might have.

Buckland’s information-as-process and information-as-knowledge are more appropriate conceptions in the context of this research because they clarify the human (‘knowledge’) and dynamic (‘process’) view of information which permeates information culture. This view is complemented by the notion that information can be framed as a part of the communication process in McCreadie & Rice.

The Slow focus would therefore be on the processual aspects of how these things are deemed to be informative, that is, the interaction that takes place between information and user. This is similar to Floridi’s “meaningful data” (Floridi, 2005). However, the focus does not exclude other conceptual groups

since it also allows for the latent informativeness of things which is 'activated' when perceived by the user, as in Buckland's 'thing' and McCreadie & Rice's 'data in the environment'. It also allows for the unintentional quality of much information activity.

Although 'knowledge' can be a controversial term (Zins, 2006), it is used in this context to emphasise a humanist view of social relations and of information seeking and use. It is not intended to initiate discussion about subjectivity, reality or truth. It is, however, a conscious decision to retain the term in describing Layer B, rather than simply opting for 'communication'.

2.3.4 Raymond Williams & communication

Use of the word 'knowledge' is also intended to emphasise the educative qualities of information culture. Life in this culture is a process of information use by which personal knowledge is developed and, ultimately, more information produced as representations of that knowledge. The work of Raymond Williams in relation to communication is of interest at this stage to underline this educational aspect, as well as introduce ideas about dominative social structures and choice. These ideas reinforce the appropriateness of positing information as the communication of knowledge, since "social life and patterns of communication are inextricably intertwined" (Eldridge & Eldridge, 1994).

Despite the intervening years, Williams' *Communications* (first published in 1962) is relevant to the peculiarly modern conceptual arguments at hand. The internet was clearly still some way off. At root is the statement that "communication begins in the struggle to learn and to describe" (Williams, 1976, p. 19). This quite accurately, though unintentionally, describes the intentions of Layer B. It also informs Layer A, since "what we call society is not only a network of political and economic arrangements, but also a process of learning and communication". To initiate this process, Williams says, we rely on and behave according to communication models, replacing, modifying or extending

them when necessary. The focus of *Communications* is on these models, namely books, newspapers, theatre, broadcast media, and the growth of advertising. The relevance to this conceptual framework is tangential, rather than direct, but powerful nevertheless.

The educative force of communication is vital to Williams' view of these models, both in individual terms of knowledge growth and in institutional terms of the operating system: what a person can learn from the act of communicating in contrast to what is being taught or delivered by the overarching system. These two aspects exist in relative proportions in the four kinds of system which Williams observes, from the authoritarian system's emphasis on controlling what is taught to the primacy of what might be learned by active contribution in democratic systems, via the paternal and commercial concerns of social responsibility and choice (Williams, 1972, pp. 116-124). The key to the democratic typology is "the struggle for space that allows for a pluralism of perspective and a diversity of contributions" (Eldridge & Eldridge, 2004) and it can be argued that developments in digital communication and the ease with which individuals may publish, and receive, information goes a long way to representing the democratic system which Williams imagines. Contributors to the World Wide Web as a communication system are largely free to communicate when and what they choose, though it is acknowledged that this is not the case in some countries and under some political regimes.

However, as Williams states, communication relies on an element of convention so that the models which enable it often "become quite deeply learned, and any growth of change beyond them can be very difficult" (Eldridge & Eldridge, 2004, p. 89). The conventions become ingrained, and expected, by those who operate within them. The dominance of the digital mode of communication can be seen to structure the communication system in such a way that information (communication of knowledge) must be instant and must be freely available. One assertion to be explored is that LIS has, to some degree at least, absorbed this dominative structure of (consumerist) speed and choice.

2.4 Layer C: the communicator citizen

The purpose of this section is to clarify Layer C of the diagram which relates to the human actor who populates the information culture. This layer is essential because it emphasises the human element of the project's perspective, and reiterates the centrality of information behaviour as an ongoing process of knowledge communication and growth.

In many ways, this is simpler than the clarification of preceding layers since how the actor or user is viewed derives from what has already been said about the environment in which they can be said to exist. Nevertheless, it is useful to acknowledge the variations of perspective, not least to reiterate the project's scope. For the most part, 'actor' is used to denote neutrality at this stage given the complexity of what constitutes 'behaviour' or 'use'.

2.4.1 A unified notion of the information actor?

As Wilson (2006) describes, LIS may be considered as comprising two broad fields of enquiry: information retrieval and user studies, or information behaviour. The third related arm of information organisation is less relevant to this thesis. The former is mostly concerned with systems research and design, the latter with how people interact with those systems (and other sources). It has been argued that the two are so distinct as to be divided by an unbridgeable gap, while others perceive overlaps which are simply yet to be explored and formalised (Miksa, 2009). How these fields frame the information actor is necessarily and understandably different: IR may be less inclined to delineate 'users', where HIB may naturally pay more attention to this element (although this is not always the case).

The difficulty of establishing a unified notion of the actor across the fields is perhaps an indication of their fundamental split. Moreover, there is a mystery to the notion of actor, or user, largely resulting from the "vagueness in how we as professionals have conceptualized and spoken of users when attempting to

think and talk about them, especially when we identify classes of such people and classes of information use in the contexts of our systems, of their use of the informational objects in our systems, and of their use of information in general" (Miksa, 2009). This section is intended to outline several ways in which the actor has been conceptualised, and clarify the project's view in the process.

2.4.2 A cog in the system: the 'user' in IR

How the actor is framed is not a primary concern in retrieval research. Technical perspectives on information retrieval and systems design necessarily focus on the systemic aspects of the information environment, and often frame the actor as a disembodied generator and modifier of queries (Kumaran & Allan, 2008; Vechtomova, 2008). The actor is conceived as a system or machine user, rather than an information user and, whilst central to whatever system evaluation or design is being undertaken, is framed rather amorphously. Information itself tends to be conceived objectively, as material in a system awaiting human perception.

Other retrieval research posits the actor to an even greater abstraction as part of a loosely defined variable, such as "searchers" (Lehtokangas et al, 2008). There is an underlying sense that these people exist and that they are the audience for which the research will ultimately provide benefits, but they are barely acknowledged, and sometimes not mentioned at all (Efron, 2008). This is understandable since the actor or their behaviour is not the primary focus of the research at hand. By omitting the human actor from the information chain, or by only implying their existence, the actor is still being conceptualised. In this respect, the actor is framed as one cog in the information machine, or as the system operative, with little or no life outside of the searches they execute within the system.

There are also cases in information retrieval research where the individual actor's needs and interaction with the system are very much the focus. 'Users' become the crux of the research around which the notion of retrieval revolves,

rather than one of many implied ingredients. This can be either in terms of the demands users make of the systems (Bai & Nie, 2008), or in terms of user evaluation of the relevance of search results (Petrelli, 2008; Saracevic, 2008). In these instances, the actor is bound to the system which is still the focus of research.

2.4.3 Human *information behaviour*

Who the actor is, and how they are conceived, is of more direct importance in research which sits towards the information use end of the LIS spectrum, as is the case with this project. Notions of the 'user' have a naturally greater bearing here, but this does not always result in conscious or explicit description of how the actor is perceived. In literature of this kind, the actor is often framed implicitly or demographically, according to the situation being explored or observed. Some examples of this implication of identity will now be discussed.

2.4.3.1 Worker & student

The use of information in the workplace is a burgeoning area of research within LIS, despite the well-developed and parallel field of *learning* in the workplace (Crawford & Irving, 2009). The related fields of knowledge management and organisational behaviour are beyond the scope of this short section, but it is noted that the information actor in much of that literature is also implicitly, rather than consciously, defined. Where workplace scenarios are the focus, the information actor can consequently be described as a 'worker'.

In the LIS literature, workplace information behaviour is closely tied to information literacy skills (Cheuk, 2008; Kiron & Barham, 2005). The impact of research such as this is to identify informational training needs of employees, and suggest avenues of development. Specific types of behaviour, such as environmental scanning, have been explored as ways in which workers achieve information literacy (Xue et al, 2010). The conceptual relationship between information literacy and knowledge management has also been explored at

length (O'Farrill, 2010; Ferguson, 2009). In these cases, there is an underlying sense of learning and development, but the information actor's role as employee or worker is foregrounded by the context under investigation. Donald Case provides a detailed view of the ways in which occupational, and demographic, groups determine the ways in which these particular users are studied (Case, 2007, pp. 252-315).

In work of the above kind, the information actor is conceived of as a worker because of the setting in which their behaviour is studied. This idea of a situationally derived definition can also be applied to information behaviour research concerned with studentship, where the information actor is characterised by their behaviour in educational contexts.

There is an established body of research which looks explicitly at students in formal education settings, often in academic libraries at university level (Ismail, 2009; Ho & Crowley, 2003) but also at school level (Abbas, 2005). Academic journals and associations devoted to both of these areas show that there is widespread interest, both in research and practice. Students and pupils in these cases are generally used as research subjects to develop and improve the services which the libraries provide (Zhixian, 2007), and also, some argue, as tools to justify the promotion of certain services and the educational core of librarianship itself (O'Connor, 2009). Interestingly, students on library and information science courses figure fairly frequently in user studies too (O'Farrell, 2009). Again, Donald Case provides a more detailed view of these contexts within LIS research (Case, 2007, pp. 301-303).

2.4.4 Momentary frames & lifelong learning

Framing the actor according to their quite specific situation at the time of information use pinpoints their role and conceptualises them with a precision that rarely exists in life. The above examples suggest a momentary frame in which the actor is captured, and this reflects the stage process models described in the previous chapter. This is an effective means of highlighting

instances of behaviour in well-defined contexts, but it is not appropriate to the notion of an information culture characterised by the near-constant communication of knowledge. Nor, as Miksa (2009) suggests, is it the only starting point for considering users at all: “How, in fact, would the way we refer to information users and use be altered if we were to begin with a more complex picture of the human as an information-processing species?”

More appropriate to this project are the conceptions of the actor which arise from the more general models of information behaviour which have already been discussed. Both Dervin’s sense-maker and Kuhlthau’s meaning-seeker offer a sense of the actor being engaged in a continual, lifelong process of learning. Moreover, Dervin (1999) asserts that “information seeking and use are defined as communicative practices” in the Sense-Making methodology, which implies that the sense-maker is also engaged in a continual process of communication.

2.4.5 The communicator citizen

If this perspective of the actor as communicator is allied with Raymond Williams’ (1976) assertion that “communication is the struggle to learn and to describe”, a powerful picture of the human element is established. The phrase ‘communicator citizen’ is therefore used to describe the human at the core of the diagram. The phrase represents the constructive nature of participation, both in the process of communication and in society. ‘Communicator’ is used for the reasons cited above. ‘Citizen’ is not intended to simply reflect an individual’s interest or participation in civic or necessarily public endeavours, but to intimate that the actor is perceived as an active member of the social structure of communication.

2.5 Summary

Having outlined the project's hypothetical view of information behaviour and associated concepts, it is possible to offer a summarising statement which encapsulates these underlying assumptions. This is intended as a backdrop to the subsequent studies, and to illustrate how and when Slow might intersect with information seeking and use.

In hypothetical summary, then: Slow information exists as a behavioural framework available to the communicator citizen, who is continually engaged in the two-way communication of knowledge within the saturated information culture.

2.6 Chapter Two references

Abbas, J. (2005) 'Out of the mouths of school children: I. Developing user-defined controlled vocabularies for subject access in a digital library', *Journal of the American Society for Information Science & Technology*, 56 (14), pp. 1512-1524.

Bai, J. & Nie, J.-Y. (2008) 'Adapting information retrieval to query contexts', *Information Processing & Management*, 44 (6), pp. 1901-1922.

Bates, M.J. (2006) 'Fundamental forms of information', *Journal of the American Society for Information Science & Technology,* 57 (8), pp. 1033-1045.

Bates, M.J. (2008) 'Hjørland's critique of Bates' work on defining information, *Journal of the American Society for Information Science & Technology*, 59 (5), pp. 842-844.

Bates, M.J. (2011) 'Birger Hjørland's Manichean misconstruction of Marcia Bates' work, *Journal of the American Society for Information Science & Technology*, 62 (10), pp. 2038-2044.

Bawden, D. (2007) 'Organised complexity, meaning & understanding: an approach to a unified view of information science', *Aslib Proceedings,* 59 (4/5), pp. 307-327.

Belkin, N.J. (1978) 'Information concepts for information science', *Journal of Documentation,* 34 (1), pp. 55-85.

Boyce, B.R. & Kraft, D.H. (1985) 'Principles and theories in information science', *Annual Review of Information Science & Technology,* 20, pp. 153-175.

Buckland, M. (1991) 'Information as thing', *Journal of the American Society for Information Science,* 42 (5), pp. 351-360.

Capurro, R. & Hjorland, B. (2003), 'The concept of information', *Annual Review of Information Science & Technology,* 37, pp. 343-411.

Case, D.O. (2007) *Looking for information: a survey of research on information seeking, needs, and behavior*. 2nd edn. London: Academic Press.

Castells, M. (2000) *The rise of the network society; The Information Age: economy, society and culture, vol. 1*. 2nd edn. Oxford: Blackwell.

Cheuk, B. (2008) 'Delivering business value through information literacy in the workplace', *Libri*, 58 (3), pp. 137-143.

Crawford, J. & Irving, C. (2009) 'Information literacy in the workplace: a qualitative exploratory study', *Journal of Librarianship & Information Science*, 41 (1), pp. 29-38.

Dervin, B. (1999) 'On studying information seeking methodologically: the implications of connecting metatheory to method', *Information Processing & Management*, 35 (6) pp. 727-750.

Eaton, J.J. & Bawden, D. (1991) 'What kind of a resource is information?', *International Journal of Information Management,* 11 (2), pp. 156-165.

Efron, M. (2008) 'Query expansion and dimensionality reduction: notions of optimality in Rocchio relevance feedback and latent semantic indexing', *Information Processing & Management*, 44 (1), pp. 163-180.

Eldridge, J. & Eldridge, L. (1994) *Raymond Williams: making connections.* London: Routledge.

Erdelez, S. (1997) 'Information encountering: a conceptual framework for accidental information discovery', *Proceedings of an international conference on research in information needs, seeking & use in different contexts (ISIC).* Tampere, 14-16 August 1996. London: Taylor Graham, pp. 412-421.

Ferguson, S. (2009) 'Information literacy and its relationship to knowledge management', *Journal of Information Literacy*, 3 (2), pp. 6-24.

Floridi, L. (2005) 'Is semantic information meaningful?', *Philosophy & Phenomenological Research*, 70 (2), pp. 351-370.

Hjørland, B. (2007) ‘Information: objective or subjective?’, *Journal of the American Society for Information Science & Technology*, 58 (10), pp. 1448-1456.

Hjørland, B. (2009) ‘The controversy over the concept of ‘information’: a rejoinder to Professor Bates’, *Journal of the American Society for Information Science & Technology*, 60 (3), p. 643.

Hjørland, B. (2011) ‘Theoretical clarity is not ‘Manicheanism’: a reply to Marcia Bates’, *Journal of Information Science*, 37 (5), pp. 546-550.

Ho, J. & Crowley, G. H. (2003) ‘User perceptions of the ‘reliability’ of library services at Texas A&M University: a focus group study’, *Journal of Academic Librarianship*, 29 (2), pp. 82-87.

Ismail, L. (2009) ‘What they are telling us: library use and needs of traditional and non-traditional students in a graduate social work program’, *Journal of Academic Librarianship*, 35 (6), pp. 555-564.

Kiron, J. & Barham, L. (2005) ‘Information literacy in the workplace’, *Australian Library Journal*, 54 (4), pp. 365-376.

Kumaran, G. & Allan, J. (2008) ‘Adapting information retrieval systems to user queries’, *Information Processing & Management*, 44 (6), pp. 1838-1862.

Lehtokangas, R., Keskustalo, H. & Järvelin, K. (2008) ‘Experiments with transitive and pseudo-relevance feedback using graded relevance assessments’, *Journals of the American Society for Information Science & Technology*, 59 (3), pp. 476-488.

Machlup, F. (1962) *The production and distribution of knowledge in the United States*. Princeton, NJ: Princeton University Press.

Madden, A.D. (2000) ‘A definition of information’, *Aslib Proceedings,* 52 (9), pp. 343-349.

Martin, W.J. (1988) *The information society.* London: Aslib.

McBirnie, A. (2008) ‘Seeking serendipity: the paradox of control’, *Aslib Proceedings,*

60 (6), pp. 600-618.

McCreadie, M. & Rice, R.E. (1999) 'Trends in analyzing access to information. Part I: cross-disciplinary conceptualizations of access', *Information Processing & Management,* 35 (1), pp. 45-76.

Miksa, F. (2009) 'Information organization and the mysterious information user', *Libraries & the Cultural Record, 44 (3), pp. 343-370.*

Morse, M. (1997) 'Virtually female: body and code' in Trend, D. (ed.) *Reading digital culture.* Oxford: Blackwells, pp. 87-97.

O'Connor, L. (2009) 'Information literacy as professional legitimation: the quest for professional jurisdiction', Library Review, 58 (4), pp. 272-289.

O'Farrell, M. (2009) 'Student behaviours during group projects: as study of LIS students at University College, Dublin, Ireland', *Aslib Proceedings*, 61 (3), pp. 302-315.

O'Farrill, R. T. (2010) 'Information literacy and knowledge management at work: conceptions of effective information use at NHS 24', *Journal of Documentation*, 66 (5), pp. 706-733.

Oppenheim, C., Stenson, J. & Wilson, R. (2001) 'The attributes of information as an asset', *New Library World,* 102 (1170/1171), pp. 458-463.

Petrelli, D. (2008) 'On the role of user-centred evaluation in the advancement of interactive information retrieval', *Information Processing & Management*, 44 (1), pp. 22-38.

Porat, M. (1977) *The information economy: definition and measurement.* National Science Foundation Reports, OT-SP-77-12 (1). Washington, DC: Office of Telecommunications (DoC).

Saracevic, T. (2008) 'Effects of inconsistent relevance judgements on information retrieval test results: a historical perspective', *Library Trends*, 56 (4), pp. 763-783.

Schement, J. (1993) ‘Communication and information’ in Schement, J. & Ruben B. (eds), *Between communication & information*. New Brunswick, NJ: Transaction, pp. 3-33.

Spang-Hanssen, H. (2001) ‘How to teach about information as related to documentation’, *Human IT,* 5 (1), pp. 125-143.

Talja, S., Tuominen, K. & Savolainen, R. (2005) ‘’Isms’ in information science: constructivism, collectivism & constructionism’, *Journal of Documentation,* 61 (1), pp. 79-101.

Tomlinson, J. (2007) *The culture of speed: the coming of immediacy*. London: Sage.

Vechtomova, O. (2008) ‘Lexical cohesion and term proximity in document ranking’, *Information Processing & Management*, 44 (4), pp. 1485-1502.

Webster, F. (ed.) (2004) *The information society reader,* London: Routledge.

Webster, F. (2006) *Theories of the information society.* 3rd edn. London: Routledge.

Williams, R. (1976) *Communications.* 3rd edn. Harmondsworth: Penguin.

Williams, R. (1983) *Keywords: a vocabulary of culture & society.* London: Fontana Press.

Williams, R. (1993) *Culture & society.* London: Hogarth Press.

Wilson, T.D. (2006) ‘On user studies and information needs’, *Journal of Documentation,* 62, 6, pp. 658-670.

Xue, Z., Majid, S. & Foo, S. (2010) ‘Environmental scanning: an application of information literacy skills at the workplace’, *Journal of Information Science*, 36 (6), pp. 719-732.

Zhixian, Y. (2007) ‘International student perceptions of information needs and use’, *Journal of Academic Librarianship*, 33 (6), pp. 666-673.

Zins, C. (2006) ‘Redefining information science: from ‘information science’ to

‘knowledge science’’, *Journal of Documentation,* 62 (4), pp. 447-461.

Zins, C. (2007) ‘Conceptual approaches for defining data, information and knowledge’, *Journal of the American Society for Information Science & Technology,* 58 (4), pp. 479-493.

3. Chapter Three
The Delphi study

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The Delphi study

3.1 Introduction

The background of the Delphi method will be explained in this first part of Chapter Three, alongside the modifications made to the technique for the purposes of this project. Round-by-round analysis and discussion will follow, from section 3.8 onwards.

The Delphi technique was selected to explore the implications that a Slow perspective may have on the theory and study of information behaviour, as represented by a group of disciplinary experts. The Delphi can be defined "as a method for structuring a group communication process" (Linstone & Turoff, 1975, p. 3), through the use of an iterative process where each participant's response is fed back to the group for consideration. The rationale for using the method, and its history, are provided in later sections (namely 3.2 and 3.3, pp. 122-128)

In this project, the Delphi method was modified for use as a purely qualitative research tool, here termed the Slow Delphi. The iterative format of the tool allowed a discursive and collective approach to the issues to emerge: the general nature of the process was constructivist as panel and moderator constructed their understanding of the subject through interaction. This reflects the constructivist perspective and nature of the project and the preceding conceptual discussion. Aspects of several formal variant Delphis were used as a framework.

Exploring the variety of perspectives was the desired output, rather than consensus, and conceptual issues were the subject rather than the forecasting of future developments. The moderator took an active role in the process to inject points of contention where necessary and in order to keep discussion relevant. However, constant comparison of responses with subsequent rounds, and verification of that material with participants, served to moderate the moderator's involvement so that researcher bias was kept to a minimum and minority perspectives were protected. The process was overlaid with elements of Grounded Theory to provide a methodological framework.

The Delphi phase of this research project was devised to address what a Slow perspective means for the study of information behaviour. A panel of information behaviour scholars was engaged to explore the key issues. In doing so, what actually constitutes a Slow perspective in an information context was also refined. How information behaviour is perceived and studied is of interest because it is here that we may discover whether there is compatibility between Slow principles and information, as illustrated by the ways in which we frame and study information use and information users.

The Delphi tests the conceptual grounding developed in previous chapters in order to understand if Slow and information behaviour engage with fundamentally different conceptions, and it examines existing theoretical perspectives and frameworks that emerge from this. Information, in an academic context, may then be perceived as immune to Slow principles because of differing fundamental conceptions. This is relevant to the popularly felt and anecdotally reported ideas that (a) there is too much information around to be effectively dealt with – an overloaded information culture - and (b) Slow is a useful means of addressing overload. This section reports on the Delphi phase.

The contributory research question which guides this phase is:

- What, if any, are the implications of a Slow perspective for the study and theory of information behaviour?

The project was not yet exploring or describing a Slow attitude within the processes of seeking and using information, or within the everyday occurrence of information practices. These areas constitute the focus of enquiry in Chapter Four: the focus group.

A conceptual perspective may emerge from this process which contrasts with the one outlined in Chapter Two. This perspective may be built on different understandings of information and society, and may not therefore allow for Slow concerns to be addressed (especially those of speed, choice and pleasure).

This would limit not only the applicability of Slow principles in information terms, but also the value with which they are regarded by information professionals (in research and practice).

3.2 Rationale

The Delphi technique was appropriate for addressing this part of the research question because discussion amongst information behaviour experts was expected to create current, dynamic material from which it would be possible to explore the range of disciplinary perspectives of the issues at hand. This range of perspectives was expected to support or explain the gaps perceived both conceptually and in the literature, or indeed fill those gaps. If they exist, disciplinary barriers to a Slow perspective would also become apparent. This would not be achievable through other means as will be shown.

The Delphi technique can generate a range of opinion from the experts involved. Eliciting as many contrasting perspectives as possible helps to illuminate the issues within the context of LIS by exploring all potential viewpoints. From this process it is also possible to delineate where attention should be focused in the subsequent empirical phase, thereby linking the project's chapters and the objectives. The Delphi provides a means of testing whether the conceptions with which the project engages are currently recognised within the LIS discipline, and specifically within the field of human information behaviour where ideas of Slow information most readily sit.

There are several further reasons why conducting a modified Delphi was appropriate to this research, and these can be outlined by answering Linstone & Turoff's questions for determining the appropriateness of the technique:

1) Who should be communicating about the problem?
2) What alternative communication mechanisms are available?
3) What can we expect from those alternatives?

(Linstone & Turoff, 1975, p. 4)

The 'problem' of question one is rooted in the conceptual gaps developed in Chapters One and Two. In order to link this problem with the research question of this phase, it was necessary to engage a panel of published experts in human information behaviour. This answers the question of who should be

communicating about the problem, and more detail on the process of panel selection follows. To pursue the constructivist approach, the experts' communication about the problem would have to be with each other in addition to with the researcher. These experts would likely be dispersed internationally and undoubtedly busy, which immediately gives rise to logistical issues.

With reference to question two above, if a Delphi study was not used to facilitate this communication, other mechanisms exist in the publishing of papers in journals and also in presenting material at conferences. This is how ideas are communicated within the field, but neither channel engenders communication *per se* or delves deeper as a research method. One-to-one two-way communication (that is, between one expert and researcher) would also be possible in the form of interviews, but given the geographical dispersion, impossible to organise in person. If conducted remotely, by email or telephone, interaction between participants would not occur. Group sessions would not be possible for the same logistical reasons. Conference attendance might be a viable alternative, but the timing of conferences and availability of panel members would not be controllable.

The face-to-face interview option is logistically impractical. Remote interviews would elicit opinion, but would prevent panel interaction, as well as the opportunity to iterate and revise opinion. The variety of opinion regarding the Information Society and information itself suggest that a similar range of perceptions will exist in relation to speed, choice and pleasure, and no alternative to the Delphi offers as much scope for that diversity to be discussed.

3.3 History

The Delphi technique was developed in the 1950s to estimate the probable effects of an atomic attack on the USA. It was used primarily to facilitate technological forecasting (Helmer, 1975, xix). Project RAND devised the technique specifically for use in situations that were ill-defined or about which there was little established knowledge. It was used extensively in military contexts, and soon extended to other areas of complex social concern, such as the environment and health. Extensive early use in forecasting meant that the technique was for a time perceived as a tool for use in exclusively technological forecasting where the key objective of any study using a Delphi was a single point of consensus, its strong quantitative feel restricting its use to appropriate fields. However, the fundamentally qualitative nature of the Delphi process “as a method for structuring a group communication process” (Linstone & Turoff, 1975, p. 3) was increasingly recognised as a strength in its own right, and this led to a divergence of use in fields such as healthcare policy and organisational behaviour.

Any Delphi study begins with an issue to be considered. The traditional Delphi moves through a series of stages, or rounds, as the panel reassess and revise their opinions about that issue in light of other responses. Participation is generally anonymous in order to afford all opinions parity of platform: although the panel may know who is involved, statements and responses are anonymised. The original style of “Delphi Exercise” used a monitor group to devise a first round questionnaire which was then distributed to a larger respondent panel. The returned questionnaires would then be summarised by the monitor group, redistributed in a second round and the larger panel given the opportunity to revise their original answers. This iterative process would focus opinion towards a point of consensus about the original propositions or questions.

The predominant style and form of analysis during rounds has evolved in line with the recognition of the Delphi’s qualitative roots. Early proponents of the technique developed statistically driven processes from which to ‘calculate’ the output, for example Norman Dalkey’s cross-impact analysis (Dalkey, 1972).

This form of analysis determines the mathematical probability of events by cross-referencing opinion gathered during the Delphi study with other potential events and impacts. As such, it reaffirms the quantitative appearance of early incarnations of the process, although the material with which such analysis interacts remains judgmental and qualitative. This apparent strait-jacketing of subjective data into objective formulae can be criticised, and is perhaps one reason why the discursive qualities of the technique emerged as a key strength and a key area for analysis.

Other forms of Delphi which do not aim at achieving statistical consensus have emerged over time as it evolved from use in technical fields to use in the social sciences, and in academia. These forms are known as 'variant' or 'modified' Delphis. Here, exploring the differences of opinion is a stronger objective than deriving one clear 'truth'. For example, Murray Turoff's *Policy Delphi* "seeks to generate the strongest possible opposing views on the potential resolutions of a major policy issue" (Turoff, 1975, p. 84). This develops a range of futures, organised according to their probability. The *Imen-Delphi*, devised by David Passig, explores the preference rather than probability of emergent futures and therefore emphasis the personal reaction of panel members (Passig, 1997). Relatedly, the *Disaggregative Policy Delphi*, is concerned with not just what a participant think will happen, but why and how they think those developments will come about (Tapio, 2003). Osmo Kuusi's *Argument Delphi* is similarly focused on breadth of opinion, but also presents another methodological difference by being more concerned with the process of debate and generating arguments than with the likelihood of an event occurring (Kuusi, 1999).

This range of modifications can be interpreted as flexibility within the technique which allows for emergent research design to accommodate the unpredictable progress of a study which involves a relatively large group of individuals (Turoff, 1975). It can also be interpreted as an instability against which the moderator must build sufficient methodological rigour (Landeta, 2006). Whilst criticisms have also been made as to how scientific a process it is, those criticisms become largely irrelevant where a scientific outcome is not the goal (Baruchson-Arbib & Bronstein, 2004). The design and execution must be robust and justifiable, but if the desired outcome stresses the subjective nature of the

opinion involved, as with several of the variant Delphis noted above, the lack of scientific output cannot be criticised (Ludwig & Starr, 2005). Indeed, the process has been complementarily described as “more of an art than a science” (Linstone & Turoff, 1975, p. 3). Other criticisms of the technique revolve around the role and actions of the moderator/monitor, either imposing their views on the process or too strongly or not doing enough to retain the trust and interest of the panel (ibid., p. 6). Steps were taken in the design of this Delphi to avoid such pitfalls and will be fully explained later.

3.3.1 The Delphi in LIS

Variations of the Delphi have been used in a range of fields of study including LIS. These studies tend towards exploring the future, though not necessarily building consensus, and also towards libraries and the library profession. The use of Delphi studies in LIS is actively encouraged as a means of generating “consensus without all the meetings” (Howze & Dalrymple, 2004), although the studies presented here provide a range of rationales. This is a summary of studies from the last ten years or so.

In line with original Delphi objectives, the majority of LIS studies using the technique look towards future developments in the field. Feret & Marcinek (2005) “reload” their earlier Delphi (1999) about academic libraries to track its accuracy and to build further opinion about prospective changes and priorities. This reloading entailed reviewing earlier findings and assessing them through the use of a follow-up Delphi. Four themed groups of opinion were used: factors which shape the image and operation of a library; the activities in which a library engages; the skills which a librarian must or should possess; issues concerning electronic media. The findings illustrated how the influence of technology was not, or could not be, predicted and how this influence was not limited to the group concerned explicitly with electronic media. Managing access to information and the skills required to do so become much more important in the reloaded Delphi than was supposed in the original study.

Other recent LIS Delphis take technological developments as their primary focus, exploring opinion about the future of digital libraries (Baker, 2006) and the development of electronic journal delivery and use (Keller, 2000). The evaluation of web pages for addition to collections is another digital area of focus and features in two Delphis which illustrate the changing nature of the field. The earlier study (Green, 2000) engages a Delphi panel of reference librarians to evaluate websites on behalf of students, saving them time and ensuring quality. The subsequent, though unrelated, study (Nicholson, 2003) uses a Delphi panel to devise the criteria against which an automatic evaluation tool rates and selects websites to create a digital library. This development saves the librarian's time, but it could also be perceived as sidelining their role in the process.

The future of librarianship is itself a focus for several studies which use the Delphi technique. Baruchson-Arbib & Bronstein (2009) explored similar areas to the Feret & Marcinek study, but gathered opinion through a specifically professional lens to assess the possible impact of technological developments on the role and skill-set of the librarian (in this case Israeli academic librarians). The key areas here were the transition from traditional to virtual library, and from a technical to a user-centred approach. This attention to the skills which librarians will need can to some extent be complemented by Macevičiūtė & Wilson's (2009) Delphi study of the research needs of Swedish librarians, which identifies their changing priorities in order to inform the LIS research agenda. Taking both of these studies into account, the future nature and direction of the LIS profession is uncertain but there is optimism that opportunities will emerge to add value to and preserve information. Specific value-adding roles are explored in other Delphi studies, such as managing and evaluating repositories (Kim & Kim, 2008) and providing information literacy training (Saunders, 2009).

Despite the uncertainty, the experts involved in these studies perceive generally that there will be a place for libraries and librarians as the information landscape develops. The changing physicality of the library itself is explored in Ludwig & Starr (2005) by generating and synthesising opinion about the future of library architecture and space planning. The changing role of LIS professionals within that space is again brought into the debate. Feret & Marcinek (2005) found that

managerial skills will become increasingly important as budgetary restrictions grow and, similarly, Ludwig & Starr find that managerial skills in the form of change management will be increasingly required.

With the exception of Feret & Marcinek (2005) who explicitly “reload” an earlier study, the Delphis described here are related only in as much as they employ the technique. Similar themes and complementary conclusions can be drawn together, but the variety of approach within the method must also be acknowledged. As stated, the majority of these studies are concerned explicitly with future developments, in keeping with original Delphi objectives. What the developments might actually be is sometimes centralised, as in Baker’s ‘Digital library futures’ (2006) and Keller’s ‘Electronic journals’ (2001). Others emphasise the possible impact of certain developments either on the services currently provided, for example, on assistive technologies in Gillespie & Green (2001) or on those employed to deliver them, for example, information literacy instructors in Saunders (2009). The key difference in the execution of these Delphis is that the former type generally invites the panel to suggest possible futures, and the latter proposes a range of futures for consideration of their impact.

In both contexts, the Delphi is employed as a tool for exploring complex issues, and this is also true in cases where the area of focus is not necessarily future-oriented. Those studies which seek to establish evaluation criteria for services or resources deal with existing issues, rather than proposed ones. For example, Nicholson’s bibliomining tool, built around the criteria refined by a Delphi panel, seeks to automate the collection building process of web-pages because librarians are unable to manually do so as they would with print resources (Nicholson, 2003). “The rapid proliferation and frequent updating” of web-based materials is cited as the cause. Similarly, the performance of existing electronic libraries is the subject of the Delphi devised by Hsieh et al, which also generated evaluation criteria (Hsieh et al, 2006). The Delphi in LIS is not then limited to consideration about the future, but has been used to explore existing issues and potential solutions.

3.4 Key variant features

The studies summarised above display both traditional and variant Delphi characteristics in differing proportions. Traditional characteristics can be seen in those that use the technique to narrow the focus of enquiry (Nicholson, 2003; Hsieh et al, 2006) or in other words, to arrive at a consensus of opinion. Others explore the future of different contexts, or the impact on them from future external developments (Gillespie & Green, 2001; Ludwig & Starr, 2005). The variant characteristics lie in the modifications that each study makes in order to streamline the process for the task in hand.

The most noticeable difference of this kind is the way in which material is generated for use. The traditional Delphi would engage a monitor group to devise the first round questionnaire, and also to analyse responses, but these LIS studies use a variety of methods to develop material. These differences often arise as a consequence of time constraints where the use of a monitor group would add an impractical amount of additional time to an already lengthy process. Establishing such groups also demands additional human resources, and so other means of devising the initial material have been developed. This illustrates one element of flexibility within the research method.

Ludwig & Starr (2005) used a preliminary group of experts to generate areas of enquiry, which resembles traditional Delphi practice, but most others use the literature to devise questions and statements for consideration. For example, Baruchson-Arbib & Bronstein (2005) invited responses from a 40 member panel to statements derived from the literature, Macevičiūtė & Wilson (2009) enlisted librarians to help formulate the issues and then complemented this by scanning discussion lists and boards, as well as the literature. Whilst most of the studies display certain modified characteristics such as these, and many state as much, none say explicitly if a particular variant version is being employed.

The Delphi process in this research draws together elements from three formal variant techniques. These are Turoff's Policy, Kuusi's Argument and Zins' Critical. The relevant aspects of each will now be discussed and the

methodological reasoning of the specific process used in this research will also be emphasised.

3.4.1 Turoff's Policy Delphi

The key features of this variant Delphi lie in its focus on the variety of opinion towards the issue at hand. Murray Turoff developed this technique in the late 1960s in order to consciously move the objective of the exercise away from "consensus among homogenous groups of experts" and towards generating "the strongest possible opposing views on the potential resolutions of a major policy issue" (Turoff, 1975). It was developed specifically for use within policy contexts where different stakeholders can advocate their view of an issue in light of and as a reaction to opposing views from other interested parties. It therefore produces normative output from those different perspectives. The panel is selected precisely for the potential contrast in viewpoints that members will bring to the exercise. In this variant method, the Delphi is a gathering and analysis tool which draws together information in order that a policy-maker has all possible options laid out before them. It is not intended to provide an answer to whichever issue is the focus but to illuminate it from all angles.

Two elements of the Policy Delphi are critical in differentiating it from the original Delphi technique and relate strongly to the Delphi in this research. Firstly, the panel is selected according to range of interest and polarity of position rather than because of similarities in technical expertise. Secondly, there is explicit acknowledgement that the process is a "forum for ideas" (Turoff, 1975, p. 101) and that it is founded on "statements, arguments, comments, and discussion" (ibid., p. 89). This foregrounds difference of opinion rather than consensus, highlights interaction between panel members and between ideas, and it emphasises the human part of the process. These are also key characteristics of the Slow Delphi in which the panel's personal perspectives are central.

However, this study is not a Policy Delphi. Rather, it uses this shift in objective as further evidence that the Delphi can be discursive and collective in nature, building towards a breadth of understanding rather than a point of agreement.

3.4.2 Kuusi's Argument Delphi

This later variant technique reverts its focus to technical futures, and in Osmo Kuusi's original development of the technique this is home computing (Kuusi, 1999). However, it is described as a variation of the Policy Delphi because it is more concerned with the arguments proposed than with finding a consensus, and seeks to explore knowledge transfer and negotiation in competitive environments. Whilst the LIS disciplinary context in which the Slow Delphi operates could be interpreted as competitive, it is not a primary focus. However, one key element of the Argument Delphi is relevant here.

Firstly, the active role of the moderator/monitor in the Argument Delphi is important. Criticisms of earlier Delphi techniques are often concerned with the moderator's influence on the process and the possibility that developments are steered on a certain course towards a preferred outcome. Kuusi highlights the moderator's role as one which intentionally impacts on the synthesis of responses and, where necessary, assumes the position of *provocateur* (Kuusi, 1999, p. 186). This means that the moderator is encouraged to interact with participants and inject points of controversy if needed. This is likely to occur during early stages of the process where issues are clarified and problem statements generated. The generation of initial material in the Slow Delphi followed this intention by positing a potentially controversial standpoint to elicit a strong reaction.

The Slow Delphi is not an Argument Delphi because its subject is not technical, nor is the primary aim to enable the transfer of knowledge between participants although this should be encouraged and would be an additional benefit. However, the active role of the moderator in intentionally generating contention where appropriate and protecting minority perspectives is used as a tool for driving the discursive nature of the process forward.

3.4.3 Zins' Critical Delphi

The Critical Delphi is the most recent formal variant to be reported and originates in the LIS field. Chaim Zins developed the variation during a 2003-2005 investigation into the fundamental conceptions with which the discipline engages; data, information and knowledge. The objective of the study was to create a knowledge map of the discipline according to the different classifications which active experts used in order to arrange their view of its building blocks. These classifications may be received ideas of formal classification, or the subjective means by which each participant understood these terms. The process and findings are reported in a series of four papers (Zins, 2007a; 2007b, 2007c, 2007d), and preceded by epistemological and philosophical treatments of the issues at hand (Zins, 2004; 2006).

The Critical Delphi is described as a "qualitative research methodology aimed at facilitating critical and moderated discussions among experts (the panel)" (Zins, 2007a). This echoes the discursive nature of both Policy and Argument Delphi variants, but this study shifts the subject of discussion from policy to concepts. This engages the panel in debate about their perceptions and their assumptions, rather than any proposed impact or development based in interpretations of fact. For example, a 1968 public affairs forecast (Turoff, 1975) illustrates how different stakeholders interpret a scenario according to their differing priorities, and then advocate according to their particular needs and wants within the framework of the Policy Delphi. Economists introduced a different set of perceived priorities than experts in education. The Critical Delphi does not invite explicit value judgments but explores conceptions, how experts perceive concepts, which may of course result from value systems themselves.

Zins' Knowledge Map of Information Science was built up around the responses to a series of open questions. This encouraged the panel to answer with lengthy sections of prose, from which conceptions could be extracted and eventually a map drawn. The panel's underlying assumptions about LIS were clarified in the process, leading to a set of six models which illustrate the different points from

which the discipline is viewed. The position of each panel member was developed through ongoing verification with them and through the revision that the iterative format of the Delphi enables.

Unfortunately, the mechanics of a Critical Delphi are difficult to isolate in this collection of articles, and further reading of the literature and of the project's web presence (Zins, 2003) provide few extra procedural details. In response to a direct request for detail, Dr Zins recommended the works already cited here. Whilst the conceptual subject matter and the creative responses reflect the intentions of the Slow Delphi more closely than other variants, the ambiguity of process did not provide as rigorous a framework as would be required to synthesise and redistribute such rich material as was expected to be generated. Steps taken to address this ambiguity will be discussed in the ensuing section.

3.5 Summary of the method

The Delphi is “a method for structuring a group communication process” (Linstone & Turoff, 1975, p. 3). It can be viewed as a qualitative research tool, used initially in technical futures but developed for use in social science research where debate and process are often more important than consensus. It has a history of use in LIS. Formal variants of the technique exist, but none suit the objectives of this project entirely. Nevertheless, key elements inform the approach used here. These are the exploration of opposing viewpoints and discussion about them proposed by Murray Turoff; the active role of the moderator in synthesising and provoking that discussion proposed by Osmo Kuusi; the exploration of conceptual issues in an open format proposed by Chaim Zins. Further rigour was added to this framework by overlaying the analysis process with elements of Grounded Theory.

3.6 The Delphi & Grounded Theory

As a qualitative research project intent on exploring and contributing to conceptual issues within LIS, the use of Grounded Theory (GT) tools in concert with the Delphi technique suits the methodological objectives of this phase. There is a fit between the iteration of the Delphi and the constant comparison at the root of GT. It should be clarified that the objective of this phase is not to develop a grounded theory *per se*, but GT offers practical methods of structuring the investigation and analysis of the opinions gathered. The reasoning behind GT will be introduced and extended to Constructivist Grounded Theory (CGT), and specific elements will be emphasised in the subsequent description of steps taken.

GT was developed by Glaser & Strauss during a study into the sociology of dying (Glaser & Strauss, 1965). The methodology was described in a co-authored book shortly afterwards (Glaser & Strauss, 1967). The primary objective of GT is to generate theory that emerges directly from the data gathered, rather than follow most sociological methods of the time which appeared to amass data purely to support or refute hypotheses (ibid., p.1). GT is most usually applied to naturalistic enquiry and the raw, rich, experiential data gathered through interview or observation.

Points of conflict emerged between these authors so that two distinct forms of GT were developed. The key divergence is illustrated by the extent to which either version explains the techniques used (Heath & Cowley, 2004). Glaser (1978) extended the original techniques of theoretical sampling, coding and memos but Strauss & Corbin (2008) outlined in greater detail the strategies which make up GT. This methodological difference reveals a philosophical split between the approaches.

Glaserian GT holds data as primary to all theory, and the researcher as distanced from that data. The Glaserian methodology is “imbued with dispassionate empiricism, rigorous codified methods, emphasis on emergent discoveries, and…somewhat ambiguous specialized language that echoes

quantitative methods" (Charmaz, 2006, p. 7). The researcher should bring to the situation only general ideas about the problem to be investigated and resist defining the area too sharply (Glaser, 1978). Theoretical sensitivity and the development of conceptual theory comes from immersion in the data, and not from pre-existing notions of what the theories might turn out to be.

However, Straussian GT acknowledges the existence and importance of prior experience in the stimulation of theoretical sensitivity (Strauss, 1987). This appreciation of human action and experience was also invested in research participants who, as human beings, were viewed as "active agents in their lives and in their worlds rather than passive recipients of larger social forces" (Charmaz, 2006, p. 7). The researcher is therefore an involved presence who requires a framework with which to structure the data. Strauss & Corbin (2008) describe a system of tools to assist the manipulation of data into such structures which may then reveal theory and ensure grounding. These tools hinge on asking questions and making comparisons.

In both versions, there is a positivist sense that theories lie dormant in the data. Glaser proposes that the data itself reveals those theories, whilst Strauss & Corbin argue that the researcher must interpret the data in order for the theory to be revealed. In a further development, towards Constructivist Grounded Theory (CGT), Kathy Charmaz disagrees that data or theory can be discovered, assuming instead that "we are part of the world we study and the data we collect". This in turn means that "we *construct* our grounded theories through our past and present involvements and interactions with people, perspectives, and research practices" (Charmaz, 2006, p. 10). Whilst the tools described echo those of Strauss & Corbin, the reason for using them is more to do with building, understanding and verifying the researcher's interpretation of ideas alongside participants than with 'revealing' latent theory. The guidelines of coding, memo-writing and comparative analysis "are, in many ways, neutral" (ibid., p.9).

The Delphi in this project was an exercise in conceptual discussion in which the researcher takes an active role. Elements of Charmaz's CGT were therefore incorporated in the process in order to relate data to emerging concepts whilst acknowledging the social construction of those concepts. These were the use of

an extended memo in order to initiate the discussion (the positional paper), thematic analysis of responses during rounds and the constant comparison of data with emerging themes and statements through verification with the panel. It is acknowledged that CGT guidelines, as described by Charmaz are most readily intended for use in interview situations with participants who have experience of the issue under scrutiny. Here, the guidelines are applied to discussion about a conceptual problem area and are therefore not being used to generate a grounded theory *per se*.

3.7 The Slow Delphi

The Delphi used in this study, then, was a modified composite of the variants described above, with a constructivist approach to design and analysis. This Slow Delphi progressed through three rounds. The key phases are outlined below, and the ensuing sections of this third chapter describe and analyse the Delphi on a round by round basis. This chronological approach reflects the layering and iteration that occurs during a Delphi study.

- Panel selection
- **Round One**
- Orientation of panel
- Responses from panel
- Analysis of responses
- Generation of statements
- **Round Two**
- Consideration of statements by panel
- Responses from panel
- Analysis of responses
- Selection of key statements
- **Round Three**
- Consideration of key statements
- Elaboration & revision of position by panel
- Analysis of elaborations

3.7.1 Panel selection

As with all Delphi studies, the key to panel selection was ensuring that participants were experts in the field of study (information behaviour). This ensures a common interest in the study which in turn aids active participation and, hopefully, commitment. In line with Policy Delphi intentions, the panel should also represent a range of perspectives within that field to elicit

contrasting views. The panel was assembled during March and April 2010 and the process used three identifiers of expertise: first, attendance (to present) at the biennial Information Seeking in Context (ISIC) conferences; second, contributions to the reader *Theories of information behaviour* (Fisher et al, 2005); and third, known research interests which could be gleaned from the literature more generally, and from homepages where available.

ISIC's purpose as a research forum is to explore "the relationship between the needs or requirements of the information user, the means for the satisfaction of those needs and the uses to which those means are put in practice organizations or disciplines" (ISIC, 2012). This also describes the concerns of this phase of the project. Since presentation at ISIC is subject to peer-review this was deemed a fair starting point for establishing a comprehensive list of potential panellists. In addition to its respected and well-established position in the information behaviour field, ISIC was chosen for its international perspective. This was in preference to ASIS&T's SIG-USE, for example, which is naturally tied more closely to North America (despite some international membership). This would begin to address diversity of opinion, if opinion was geographically influenced. The contextual element of the conference purpose is important too, in underlying the existence of social, everyday practices within which information activity occurs.

Since its inception in 1996, 227 people have authored papers presented at ISIC. In order to identify experts, as opposed to those who may have presented a relevant paper as a one-off, a cut-off point was introduced which isolated those who had presented at 2 or more of the conferences. This resulted in a list of 47 potential panellists, the majority of whom had presented at 2 conferences, with just one presenting at all 7 ISICs to date.

This list was augmented by cross-referencing it with *Theories of information behaviour* (Fisher et al, 2005). 8 experts who had missed the ISIC cut (i.e. who had presented just once) were relisted as a result of their contributions to the Fisher volume. Other contributors to the volume were not included in the list of potential panellists because the theory they presented was not relevant to the issue at hand, or was not a theory at all (see Chapter One, 2.1, pp. 20-32 for

discussion about the importance of terminological clarity). In order to be relisted, experts' theoretical contributions to the volume had to originate within LIS and / or be supported by other research interests, gleaned from homepages and from other publications. 9 further potential participants were identified through their known research interests outside of ISIC or the Fisher volume. Therefore a list of 64 experts was ultimately devised.

The potential panel were emailed in early March 2010 and invited to participate in the Slow Delphi (available in Appendix A). This included a broad introduction to the research problem and requested that interested parties signal their willingness to participate as soon as possible. 50% (32) of this initial group replied, although just under 11% (7) declined to participate. Of those who declined, the majority (6) did so on the grounds of not having enough time, although one respondent declared the process not her "cup of tea". This resulted in a Round One panel of 25 experts.

The international perspective was retained, with a bias to North America which was expected due to the number of researchers engaged in information behaviour work in that region. This basic geographical breakdown reflects where the researcher is based, rather than their continent of origin.

- North America 52% (13 / 25)
- Europe 32% (8 / 25)
- Asia 8% (2 / 25)
- Australasia 8% (2 / 25)

Some further descriptive background of participants is provided later, during discussion of the final panel.

It was made clear from the outset that the panel would have to be active and willing participants in the process if it was to be a useful or interesting experience for them. The collaborative and constructivist nature of the Slow Delphi was emphasised and communication encouraged whenever a problem or concern was encountered. The panellists remained unnamed to each other, and all feedback in later sessions was anonymised. This too was explained at

the start. Participants will here be referred to as #1, #2 and so on. The panellists were told they may leave the process at any stage, and to flag up any issues of timescale or existing obligations as soon as they arose. Some participants did voice concerns over timings but rather than opt out, all were inclined to start the process and navigate any issues when they presented themselves.

Having selected the potential panel, the first stage in the Slow Delphi process was to generate material for consideration. This is described below, followed by round-by-round analysis and discussion.

3.8 Round One

3.8.1 Orientation

The first stage of Round One, similar to the Policy Delphi's 'formulation' stage, was designed to orientate the panel in the subject and draw their attention to the issues at hand. These issues had been generated during the literature review and represented elements of the conceptual perspective, and this first round was an exercise in communicating those issues and eliciting responses to them. This was achieved by distributing a 2500 word positional paper that introduced particular aspects of the speed/choice scenario ("infomania") and suggested an alternative perspective based in Slow principles ("infodiversity"). The paper was written in the first person to communicate the moderator's active role in the Delphi process, and was intentionally controversial to provoke the panel into a reaction as per Kuusi's *provocateur.* The paper is included as Appendix B.

The paper avoided referencing specific theories or works to prevent leading the panel towards an exercise in criticism, of the theories or the theorists. Also, it was stressed from the outset that this was not an exercise in practical criticism of theories or indeed of the paper itself, although the panellists were invited to use specific examples in their responses if they wished. The point of this stage was to generate material for later rounds, but also to engage the panel to think critically about the issues raised in the paper. In this sense, the positional paper represented an extended initial memo which suggested thematic codes around which the panel might structure their thinking and their responses.

The panel was invited to read and respond to the paper, and were given 7 weeks to do so. Responses could be of whatever format and length each panellist required to explore and communicate their thoughts. 1000 words was indicated as a preferred maximum, in order to prevent the analysis stage from becoming unwieldy, but this was stressed as preferred rather than strict. The intention was to avoid a question and answer session, although some responses took the form of answering broad questions laid out in introductory and subsequent emails. The reasons for using such an open-ended orientation

round were two-fold. First, the point of this modified Delphi was to initiate and facilitate critical thinking and reflection through as varied a collection of perspectives as possible. Such freedom of response would allow thoughts to germinate and develop more readily than if a closed or overly structured format was employed. Secondly, the range of definitions and perspectives in other areas of LIS suggested that there would be similar variety here and this was to be encouraged. Inviting commentary on specific theories, or defining the areas for consideration too narrowly could restrict that variety.

There were some issues with initiating the Delphi in this manner and several panellists withdrew at this stage. Some panel members had previous experience of Delphi studies and were unable to fit this method of generating discussion with their expectations of the process. Some had not expected the process to be a relatively creative one and did not understand the freedom of response they were faced with. One withdrawal, received hours after the paper had been sent, was opposed to the process beginning with an unreferenced paper. Despite consistent messages that the paper was not intended as a scientifically grounded piece of research, but as a starting point for the panel's own thoughts, this withdrawal could see no worth in a project that began in such a way. More detailed explanation of the Slow Delphi's intentions and processes may have prevented these withdrawals. Interestingly, one panel member proceeded to participate in the Delphi despite profound misgivings about the process and the paper (#8).

3.8.2 Panel response & demographics

17 of the original 25 (68%) panel members sent a response to the positional paper. Of the 17 responses, 41% (7) were around 1000 words, 41% (7) around 500 words and 20% (3) significantly under 500 words. This represented a substantial quantity of material with which to clarify or contest the gaps perceived in earlier stages. It also represented active contributions from the panel members to the research process which is more dynamic and arguably more useful than interpreting published material on indirectly related subjects.

The submissions were numbered 1-17 for ease of manipulation in subsequent analysis stages.

In order to contextualise their contributions, an overview of the panel's expertise and fields of interest will be presented. This is not intended as a comprehensive demographic representation of the participants, but as a means of appreciating later discussion and findings.

Of the 17 panellists, 11 held professorships based in Europe or North America. 4 of the remaining 6 participants held doctorates in LIS, and 2 were research fellows, each with over 15 years of research experience in the field. The chairs held ranged across fields related to libraries and information, such as 'Information and Learning', 'Human-Information Interaction', 'Knowledge Management' and 'Organisational Management'. Whilst the vast majority of the panel were based within library and/or information schools, representatives from business, media and library practice also took part.

Due to the nature of the selection process, all panellists displayed an active research interest in the information needs or information behaviours of various groups. These groups included the homeless, adolescents and those with learning disabilities. 3 of the panel were particularly interested in the forms of communication which exist between parties in a civic or social context: national and local government, for example. Information retrieval was cited as an interest by 2 participants, and the theories of LIS an explicitly stated research concern of 3. These concerns and interests, and the level of expertise within the group, were deemed to represent a rich source of opinion for the Delphi phase of the project.

3.8.3 Analysis

Throughout analysis of Round One, memos were written about the analytical process and about the Delphi process at large. This was to reiterate the

rationale of decisions made whilst working through the responses. The following section derives largely from those memos.

Although memo writing is a term and technique derived from Grounded Theory, it is crucial to reiterate that this project is not aiming to generate theory *per se*. The main difference between analysing the panel's responses and what GT proposes is that the Slow Delphi is not looking at events. It is looking at interpretations and opinions about concepts and situations. These situations may be imaginary and not have been experienced by the panel, or may have been relayed to them anecdotally. To code the responses using gerunds or action-based concepts as Charmaz proposes (2006, pp. 47-48) would be to force upon them a sense of experience that does not (or may not) exist. The Delphi responses are intentionally abstracted from experience. To 'reduce' them to action would make them into something they are not and imply that the respondents had experienced situations when they had not.

Whilst the submissions were in response to a paper which outlined areas for consideration, the goal of the analysis stage was not to force the submissions into those areas but to explore the variety of perspectives on offer. It was obviously likely that most of the material would echo the positional paper in subject but it was important to avoid blinkering the analysis against other areas which might also emerge. To ensure that concepts emerged from the panel's responses, comparison was made between submissions without referral back to the positional paper. Verification of this process was ultimately formalised with a mid-round feedback and negotiation exercise with individual panellists. The synchronicity of CGT and the Delphi is illustrated through this processual verification with participants. The viewpoint in the positional paper becomes one of many in this constructive approach and as such, becomes as much part of the discussion as the responses to it whilst also becoming an indirect influence on the dissection of submissions into groups (Charmaz, 2006, p. 54).

3.8.3.1 Initial thematic reading

The objective of Round One was to generate statements for consideration in later rounds, and building these statements relied on appropriate coding of the responses. First, all submissions were assessed on an individual basis and general ideas recorded as annotation. This process was quick, as Charmaz suggests, in order to avoid analytic ruts at such an early stage and to build a broad picture of the form, attitude and tendencies of each piece.

It was clear that this initial assessment was guided by preconceived ideas because of their prominence in reviewing the literature, and because the submissions were elicited as responses to those ideas. This confirmed that CGT rather than Glaserian GT in particular was the most appropriate approach, although it should be restated that this was an overlay of techniques rather than a fully committed adoption of the methodology.

The broad picture showed that a majority of submissions (12: 71%) felt that there was some issue to be explored in relation to informational speed and/or choice although causes, effects and terminology appeared contentious. A minority (5: 29%) either did not understand the issue as it had been communicated to them (#9) or felt that it was not problematic enough to warrant such an extreme reaction (#17). It is worth reiterating the intentionally controversial tone of the positional paper at this point.

It was likely that this ‘dissenting’ group had a view of LIS, and of society at large perhaps, that was different to the one that supported the positional paper. If this was the case, it would mean that these panellists understood the situation differently, or did not recognise the problems as they were outlined. Some stated this explicitly: they did not think overload, for example, was a problem because the situation was quite different from their perspective (#5; #17). This early reading of responses suggested that it would be possible to build contrasting conceptual perspectives of the issues at hand.

The analysis would then proceed to compare the themes of the ‘dissenting’ submissions with those that largely felt that there was an issue, to see if

overlaps between the contrasting responses existed and to see whether thematic groups emerged that might bind all submissions together.

Submissions were therefore read closely and repeatedly to identify the represented themes. This was executed on a submission by submission basis, and then between submissions. The initial thematic analysis of the 'dissenting' group generated fourteen possible strands to pursue:

1) Consum* (consumer, consumption; also related notions of production)
2) History (of perspective, of LIS)
3) Paradox (essentially of 'choice')
4) Individuals (personal variances)
5) Geography (different contexts)
6) Speed & choice (in tandem & also pulled apart)
7) Constructivism (social constructs)
8) Societal (social forces)
9) Nature of information (what it does, what it's for)
10) Provenance (links, chains, authority)
11) Overload (is it a problem?)
12) Time (including tempo)
13) LIS (specifically about the discipline, including HIB)
14) Applications (of Slow, and issues as to its applicability)

3.8.3.2 Problems with thematic reading & coding in a Delphi context

Although useful as an indication of content, this thematic reading of the submissions could not be developed to establish codes. It became clear that coding in a Delphi context is a different process to that which is understood by the term in other qualitative research, and that tightly defined conceptual codes were not necessarily the objective of this phase.

Analysis was originally intended to move to the 'assenting' group to see where overlaps might exist. It appeared presumptuous to move through the

submissions in this way: identifying where opposing submissions might agree felt forced and the resulting groups felt awkward. In practical terms, many segments of text could sit in more than one strand which made comparison difficult without falsely duplicating them. Also, some of the panel's assertions were grouped together despite operating at different levels of conceptual engagement and this too felt awkward. So, two units in the *consum** group may refer on one hand to consumerism as a broad social context (#9) and on the other, to the individual information user as consuming information as they move through the search and use process (#17). In this example, it may have proved more useful to identify the first as belonging to a *societal* thread, and the second as belonging to a *user* or *individual* themed thread. Whilst the themed grouping linked the two, it did not provide enough, or the right, commonality from which to proceed.

This illustrated that the coding process in the context of a Delphi is actually the derivation of statements from the responses, and the objective of this round was to generate those statements. Statements are, in effect, a Delphi's codes. Thematic coding would not achieve that objective because the statements must be derived from the submissions themselves and not from emergent codes. This sub-stage needed to identify shared material for those statements and not pair text off simply because it seemed to relate to similar themes.

3.8.3.3 Breaking submissions into units

To isolate like segments and begin to develop an understanding of where submissions shared material or perspective, it was necessary therefore to break them down more precisely than initial attempts had achieved. Each submission was dissected into "units". The dissected units varied in length from one sentence to one paragraph but all were self-contained and related to one point of discussion. These were allocated a unique identification number comprised of submission number and unit number within that submission, appended with 'u'. This was necessary to differentiate the original units from the negotiated statements that were ultimately derived. For example, the 3rd unit in the 4th submission would be labelled "4:3u". All groupings were tracked in Excel.

Each participant's submission is available in Appendix C, dissected into units of analysis. The submission from participant #10, divided into 27 units, is outlined in Table 1 below as an example (pp. 150-152).

A way of arranging the units from all submissions was therefore derived from the conceptual diagram described in the previous chapter (2.1, pp. 80-81). The diagram encompasses a variety of levels of conceptual engagement, other than the very abstract, and units were expected to relate to at least one of the layers without being forced to do so.

Once all submissions had been dissected and the units arranged in this way, comparisons could be made across multiple submissions for thematic similarities and shared perspectives. Opinion statements would be generated from these grouped units. The initial strands were not coherent within themselves or in relation to each other, and so by establishing this common conceptual grounding instead, more robust groups and statements could be built in their place.

10:1u	This is an impressionistic set of responses rather than a coherent essay in reply. I wasn't exactly sure what you were looking for, but these are the kinds of things I scrawled as I was reading!
10:2u	It's interesting that the two notions are based on quite different metaphors; infomania takes psychopathology as its base while the idea of infodiversity is clearly rooted in ecology.
10:3u	This in itself seems to me emblematic of bigger conversations about social life and its meaning.
10:4u	I've had people make use of psychopathology to describe themselves in positive ways; an information addiction is presented as a healthy and positive kind of mania: "I'm an information junkie" in much the same way that "I'm a healthy food/exercise junkie" would be used to account for socially accepted healthy living standards rather than to justify anorexia...
10:5u	A belief in infomania requires that one accept that the "Information Society" exists and that life is, in fact, getting faster.
10:6u	There's some argument about whether the amount of time devoted to work vs leisure has in fact increased as this model assumes.
10:7u	"Slow" is certainly a common response to the notion that the world is speeding up.
10:8u	This link (posted to Facebook by an LIS doctoral student I know) posits disconnection as the new counterculture: http://andrewsullivan.theatlantic.com/the_daily_dish/2010/04/logging-off.html
10:9u	I definitely agree with you that theories of information behaviour largely leave time out and…
10:10u	…assume, not only a linear process, but a single "information need" being addressed in a systematic way at a given time.
10:11u	I wonder about the concept of "overload". Does overload have to do with the amount/volume of incoming information, or just its pace?

10:12u	One note I made to myself in the margins of your position paper is around vocabulary: while the word “consumer” carries the baggage of hypercapitalism, the term “patron” hearkens back to a more leisurely time and, perhaps more importantly, to a leisured class who had the time to seek out music and arts to enjoy, as well as the resources with which to enjoy them.
10:13u	While there’s been lots written decrying the customer-service language in LIS, I don’t know that there’s been a similar critique of the language of patronage.
10:14u	I had a few conceptual difficulties with the position paper. First, do afflictions and compulsions in fact derive from information overload? Or does the compulsive acquisitiveness of hypercapitalism lead to overload?
10:15u	Is the “power to choose” in fact better represented as “the responsibility to act appropriately”?
10:16u	Also, I’m concerned that your distaste for seeing seeking and using information as consumerist acts might blind you; there’s tended to be a sense that “information,” like literature, culture, art, is somehow higher in purpose than base commercial ends.
10:17u	While this does help to point out the fundamental distinctions between productions of the human mind and productions of the human or mechanical hand, completely divorcing “information” from its economic contexts is, I think, misguided.
10:18u	Even though the exchange of information may not be a commercial endeavour in that no money changes hands, it could create economic value.
10:19u	And information could, like a theatrical production, be considered a consumable product (or service, if you prefer).
10:20u	And people certainly profit, like it or not, from the ownership and control of information.
10:21u	Question: you say “infomania that library and information science strives to alleviate”. Does it? Isn’t a certain degree of infomania required to keep the entire LIS endeavour going?

10:22u	I’ve long agreed with you on the problematic positive language used for people who actively seek out and use information and the corresponding negative language for those who don’t. I find the monitors : blunters dichotomy particularly problematic in this regard.
10:23u	You talk about a “natural time and natural tempo”. What would a natural time look like? Who or what would be the pacer for a natural tempo? For example, geological time is natural, as the speed of walking, as is the speed of light. What is information’s “natural time”?
10:24u	A concern about infodiversity: I think it’s overly idealized to assume that people could necessarily retain control of or attain mastery over everyday life, or control or adjust its tempo.
10:25u	Many people’s everyday lives are far enough outside of their control that it’s well beyond an information problem. For whom would this control be possible, and under what circumstances?
10:26u	How does your concept of infodiversity differ from the multiple expansion of sources that itself leads to/is characteristic of infomania?
10:27u	And is the ability to choose slow information just another option available within the hyperconsumerist world of infomania??

Table 1: An example of a dissected Delphi submission

3.8.3.4 Arranging units according to conceptual layers

This was not an exercise in generating or identifying the concepts that a submission was disclosing or asserting. It was an exercise in dividing the units from all submissions into the appropriate level of conceptual engagement. As such, deriving codes was not an objective in this phase. Units from submission #10 (as detailed above) were found to represent each of the groups and will be used as examples here. Emphasis is original, unless otherwise stated. This division of units operated on the following terms.

- *Group A: information society*

Units in this group relate to the existence, or not, of an Information Society. They may also relate to society more generally, or the paradoxes that exist at a societal level. This group operates at a relatively high level of abstraction from the specific issues raised in the positional paper, as indicated in the conceptual diagram of Chapter Two, although it does contain some reference to speed and choice when framed as societal drivers. Overload also features where it is perceived as external to the individual. For example:

10:8u: I wonder about this concept of ‘overload’. Does overload have to do with the amount/volume of incoming information, or just its pace?

- *Group B: the nature of information*

This group comprises units relating to the nature of information, but also includes how the user is constructed when it is a direct repercussion of how information is itself framed. Also included here are units that deal with epistemologies since perceptions about how we know impact on perceptions about the purpose and role of information. For example:

10:19u: And information certainly could, like a theatrical production, be considered a consumable product (or service, if you prefer).

- *Group C: information behaviour/practice*

This group deviates from the original diagram by being concerned with perceptions of LIS, HIB and research within the field. At this point, it was felt that a group relating purely to the human actor (as per the original diagram) would be too narrow. Included here are anecdotally reported examples of information behaviour. Also in this group are units which make more precise mention of speed and choice when related to behaviour (rather than in Group A where they relate to society in relative abstraction). For example:

10:4u: I've had people make use of psychopathology to describe themselves in positive ways; an information addiction is presented as a healthy and positive kind of mania…

- *Group D: Slow information*

This group is an extension of the original diagram and includes hypotheses about the existence of Slow information, or Slow information behaviour. There are fewer units in Group D than any other group, and this is to be expected. This group relates to a hypothetical view of behaviour, as yet unexplored, so it is right that little data exists in this area. The panel were not necessarily expected to comment on suggested applications or limitations of Slow within LIS, although discussion about them was encouraged. The group contains some units which are concerned with possible arenas for Slow within the discipline (which overlaps with Group C) and some which consider the societal contexts which might support Slow principles (which overlaps with Group A). For example:

10/27u: And is the ability to choose Slow information just another option available within the hyperconsumerist world of infomania?

- *Group B-C: bridging group*

It was ultimately necessary to introduce a bridging group between B and C. The units here combine elements of the nature of information and information behaviour, most usually by invoking or describing the information actor. It includes units which concern perceptions of the user, either in relation to information (*what* is being used: Group B: "information allows / encourages /

restricts a user to…") or to behaviour (*how* it is being used: Group C: "the user employs information by / for / in…"). For example:

10:12u: While the word 'consumer' carries the baggage of hypercapitalism, the term 'patron' hearkens back to a more leisurely time and, perhaps more importantly, to a leisured class who had the time to seek out music and arts to enjoy, as well as the resources with which to enjoy them.

- *Group P: process*

A final group of units addresses the process itself. These relay issues with the Delphi and the positional paper, and general comments on participation and method. For example:

10:1u: This is an impressionist set of responses rather than a coherent essay in reply. I wasn't sure what you were looking for, but these are the kinds of things I scrawled as I was reading!

3.8.3.5 Comparison of units

Units from different submissions in each group were compared to ensure levels of engagement were coherent between them. For example and amongst others, alongside the Group A unit from #10 (repeated below), were the following units from other responses:

10:8u: I wonder about this concept of 'overload'. Does overload have to do with the amount/volume of incoming information, or just its pace?

1:12u: I would agree that instantaneity is promoted as desirable, not only in the Information Society at large, but in Society more broadly. Everyone wants everything now!

17:2u: I personally feel that the term ‘information overload’ is far less problematic than assumed (the real problem, I think, is communication overload).

Having settled on a provisional arrangement, the groups were listed in Excel according to their unique identifiers. Decisions were revised where necessary during the listing process by comparison with other units in the group, and also by reading each unit in the context of the original submission to assess whether (a) the unit was appropriately dissected and (b) the unit was appropriately located.

A full list of unit numbers arranged by group is available in Appendix D. This can be cross-referenced with Appendix B to ascertain the content of each unit.

3.8.4 Generation of statements

3.8.4.1 Grounded thematic reading

The first task in generating statements from the collated units was to identify common ground between them beyond the conceptual layer which they represented. With all units listed in submission order in one of the 6 groups, they were compared with each other to identify where similar points of argument were being made. These could be conflicting or contrasting points but they nevertheless share a theme or subject. For example, two of the units above (10:8u and 17:2u) relate to the idea of overload within the broader Group A.

Sub-groups began to emerge which echoed the thematic strands derived from the initial but ultimately unsuccessful process. These were not pursued in great detail at this point, but provided flexible strands within and across the groups that could eventually be used as a framework for analysis. This further comparison confirmed whether units had been placed with like units in relation to the conceptual layers.

3.8.4.2 Language & interpretation

In comparing units, it became clear that the panel used different terms in their submissions to talk about the same thing, or interpreted terms used in the positional paper in different ways. This was interesting in that it illustrated the difficulties of discussing issues in the two dimensional context of the Delphi (i.e. written rather than face-to-face) and also in that it elaborated on the differences of perspective that had begun to emerge. If each panel member interpreted the word ‘information’ differently, or took ‘information overload’ to mean different things then discussion was likely to revolve around those interpretations rather than finding one ‘true’ consensus.

Exploring these differences was an objective of the Delphi, and so potentially contentious terms were retained as used by panel members. In subsequent rounds, the panel would be invited to expand on their interpretation of the word or concept if it proved controversial. Whilst identifying common ground between units, attempts were made to standardise the tone and style of language as much as possible. In order to do so, units were at this point compared with the elements of the original positional paper to which they referred or related, and the original style transposed where appropriate and only where it did not mask or diminish the point in the submission. This was intended to unify the resulting statements, although it was not an exercise in discourse analysis of what was being said. Also, it was not an exercise in fitting the units to the assertions of the positional paper but drawing the original style and tone together with the submissions. This was verified, and amended where necessary, during the mid-round negotiation process.

The objective here was to ensure that the resulting list of statements would display cohesion, but still provoke reaction through the contrasting perspectives derived directly from the panel’s submissions. Complex units were distilled into multiple single statements where appropriate, or set aside until further verification with each panellist was possible. This example comes from Group B-C:

3:24u: Social tagging, etc., is supposed to make patrons co-producers but really co-opts them as unpaid labour, promoters, reviewers, cataloguers, reader's advisory, etc.

Thematically, this unit sits in multiple strands: consumption/production, commercialism, the user, division of labour. It is also making two contrasting assertions about the impact of social tagging. In order to convey those assertions and gather opinion about both rather than force a choice between the two, two statements were proposed to the panel member for verification.

- Social tagging enables users to co-produce information
- Social tagging co-opts users as unpaid labour

It was possible to devise some statements which represented units from multiple panellists, and it was also possible to standardise the style of language so that pairs or groups of statements were devised to represent different perspectives. Although the original submissions varied enormously, the opportunity to consider them alongside each other was established through this standardisation and in some cases, conflation.

For example, the following two units were conflated into a common statement to be independently verified by the panellists involved.

2:4u: Some sectors of people may experience what is described as infomania from time to time. Some experience it more often than others.

9:4u: Even the same person may exhibit hectic infomanic behaviour at one moment and follow the pattern of Slow movement next day or even the same evening.

The statement:

- Different individuals may experience different levels of overload at different times depending on personality and context

Examples of specific theories and reported behaviour were phased out in order to avoid panel members without prior knowledge being alienated from the discussion. Other units were deemed too unwieldy to be broken down, or securely positioned in a group, and were also phased out. Panel members were invited to rework these areas during the mid-round negotiation. Many of the submissions stated general perceptions of the discipline and research within it and these were retained to generate a broad understanding of how experts interpret the field in which they work.

In summary, the statements were derived from the submissions, using pre-conceived conceptual layers as guidelines for comparison, and rebuilt or refined in liaison with the panel. The statements were viewed as socially constructed and iterated memos within the Delphi framework.

A full list of the statements that were ultimately derived and taken forward for consideration is available in Appendix E.

Appendix F details the unit to statement conversion, and *vice versa*. This is a simple two-part list of, firstly, the original unit numbers alongside the statement numbers that were derived from them. The second section of the list shows the process in reverse, from the derived statements back to the units they were generated from. These lists can be cross-referenced with Appendix C (unit list) and Appendix E (statement list) to ascertain the text of each element.

3.8.4.3 Verification & negotiation (panel + moderator)

The statements derived were negotiated with each panel member. The statements were rearranged according to the order in which they represented the original response, and the panel was asked to verify that they represented their submission. How the statements were derived was explained in a separate document. It was explained that the proposed statements may not reflect the panel member's own point of view but that they should reflect the point of discussion suggested by the original submission.

The panel members were invited to comment on the statements and suggest revisions, exclusions or further additions. This was a further exercise in comparison which went beyond interpretation of the submissions, and back to the participants' views. This was intended to ensure that the detail of what was said had been understood and to ensure that moderator perceptions were not unduly influencing the panel's responses. The process invited criticism of the statements in order to ground them in the original submissions. Areas which required further explanation were also highlighted at this stage.

16 of the 17 panel members responded to these verification documents. The withdrawal was a victim of prior obligations and the corresponding statements were withdrawn from the process. The 16 remaining panellists eventually verified the majority of their statements as representative of their original submission. There was a degree of negotiation in each individual verification process. In some cases, the panel member was unsure of how a statement had been derived and was therefore directed to the explanation document sent previously (#10). In other cases, the panel member felt unsure about the use of certain terms and often cited the variety of interpretation as a hindrance to the process (#9). In this situation, it was explained that variety and discussion was the objective and contested terminologies had been retained for that reason. Confusion might also emerge but the aim was to unravel it in subsequent rounds.

Ultimately, a list of 197 statements was derived, negotiated, verified and collated (detailed in Appendix E). These were then rearranged into 13 broadly themed grids which echoed the original attempts at coding. However, these themes emerged as a frame over time throughout the listing, distilling and verification processes. This was felt to be the most useful way of structuring Round Two for the panel. If each panellist's statements had been listed in succession, the comparison of different perspectives would be difficult because they would not necessarily be considered together.

The conceptual layers would not have provided a useful structure either given that the panel were unaware of this foundation other than through its inference

in the positional paper. These broad themes were not intended to direct the future of the Delphi but to present the statements in a meaningful way. Subsequent rounds could, however, concentrate on specific areas if they proved to be the most debated.

Each statement was given an identifier which represents the themed grid it appears in (1-13) and its position within the sequence, appended with ‘s’. This renaming was necessary to distinguish between original units and negotiated statements. A complete list of statements is, as already stated, detailed in Appendix E.

The 13 themes structuring Round Two are shown below, alongside the number of statements in each:

1) The nature of information, its use & users [19]
2) The information seeking process (including needs & information literacy as related to effective seeking) [13]
3) Information overload & its repercussions [21]
4) Convenience & ease of access [9]
5) Consumption, consumerism & commercialism [20]
6) Speed & scale of information delivery & information access [9]
7) Time, speed & tempo [23]
8) Quantity & variety [8]
9) Space & place [5]
10) The internet & social media [10]
11) Models & theories of information behaviour [12]
12) LIS & HIS: research & practice [21]
13) Slow principles [24]

3.9 Round Two

3.9.1 Consideration of statements

The collated matrices ran to 28 pages and each theme given its own discrete section. The panel were given an 11 week response window to enable consideration of such a lengthy document. The grid included a Likert-type scale to gauge general tendencies. This operated on a 5-point scale: strongly agree; tend to agree; neither agree nor disagree; tend to disagree; strongly disagree. Whilst this would not engender discussion by itself, the distribution of responses could be identified and the most contentious statements isolated for inclusion in subsequent rounds. Space for further commentary was also provided, for example if terms were ambiguous. Panel members were also given the opportunity to decline answering each statement if they felt unable or uncomfortable, and were asked to provide their reasoning where possible. This was to acknowledge that essentially subjective interpretations were being sought and these might not easily fit within a 5-point scale, especially in light of the potentially controversial terminologies being used.

3.9.2 Analysis

All panel members returned their statement lists meaning there were still 16 involved in the process. The main aim of Round Two was to identify statements for further exploration in Round Three. The objectives for this round were therefore to identify the statements (and areas they represent) which the panel reacted most strongly to as illustrated by low levels of neutrality. These areas would naturally relate to earlier conceptual work given the way that the Delphi was initiated, and would also be selected according to their utility in light of later empirical work. So there was a quantitative measure in this isolation process (how many members responded neutrally or indeed the level of contrast in responses), as well as a qualitative and subjective decision making process for the moderator to go through (how relevant/useful).

Although the aim could be approached in a purely operational way, that is, what steps needed to be taken to simply identify statements of interest, the material generated in this round is worthy of some qualitative evaluation in its own right. Some of the general trends of agreement across other statements can be assessed and these illuminate parts of the research question under investigation in this phase. This question revolves around Slow as a methodological lens. It is:

- What are the implications of a Slow perspective on the study and theory of information behaviour?

The contributory research question being addressed is:

- Are there disciplinary (or other) barriers to a Slow perspective of information behaviour?

3.9.3 Discussion & selection of key statements

Five key areas emerged which illustrated possible barriers or causes of tension for a Slow perspective in information behaviour research. These areas will now be discussed: the Slow perspective of each will be introduced, responses to relevant statements summarised and the statement which best represented each area will be outlined. This statement was deemed to best fit the quantitative and qualitative criteria mentioned above, and was taken forward to Round Three (i.e. five statements survived). This derivation process necessarily meant that some areas of interest could not be taken forward, but these will be discussed here as appropriate. The key areas reflect the thirteen themes of Round Two, but draw in statements from other sections too.

3.9.3.1 Area 1: perspectival differences within LIS, and between LIS & 'reality'

This area began to address directly the contributory research question. In it, the panel explore the mismatch of understanding between LIS and the users who form the basis of all research and practice in HIB.

It is well documented that a variety of perspectives exist within LIS as to the nature of information, and in this branch of LIS, the nature of information behaviour (as reviewed in Chapters One and Two). What emerged from Round Two is that there is also a contrast between how LIS views its object of interest and how 'ordinary' people view it. This is to be expected, since any discipline defines its scope and creates terminologies to describe and explain its area of focus. These definitions and terminologies may not be important or understood outside of the discipline in question, and the discipline may lose sight of its real-world relevance through over-definition. This has implications for the adoption of Slow as a methodological lens within the discipline because it might mean that LIS does not automatically recognise itself in Slow, and vice versa. This might then explain the relative lack of LIS attention to the things with which Slow engages (e.g. tempos and speed). A purpose of this project is to bridge this gap by highlighting those elements of Slow thinking which do resonate with LIS.

For example, a Slow perspective of information would hold that its power and value lie in its communication. The focus is on the role of information in an everyday sense, rather than in a work-based, systems or necessarily critical incident sense. It is the information culture: Slow addresses how people manage their information choices when its communication has become so accelerated and proliferated.

A set of statements in Round Two addressed the nature of information, and these can be placed on a continuum from an instrumental object or systems oriented view to a human constructive view. Slow principles would interact with the human end of the spectrum. The panel largely disagreed that information is simply the fundamental unit of an information system (1:3s) (10 of 16) or relatedly that the information user is a consumer of those units (1:4s) (9 of 16). This is understandable given the area of expertise of the panel (human

information behaviour) and was reiterated by 15 of 16 agreeing that “information is created between or among people in their interactions with each other” (1:10s). This would imply that the concerns of Slow are appropriate to this area of LIS because of the principle of social connection (as discussed in Chapter One, 1.3.1, pp. 48-50).

Beyond the fundamental nature of information, the process of seeking information was also discussed. Again, this illustrates how the discipline views its area of focus and not necessarily how it exists in real terms. This area proved controversial: where half the panel agreed that information seeking is instrumental (2:4s) (8 of 16), a quarter responded neutrally (4 of 16) and the remaining quarter (4 of 16) disagreed. This may reflect the research interests of the panel or their interpretation of why information seeking is undertaken. Subsequent statements introduced other elements of information seeking which might be problematic within an instrumental view of the process, but not for this panel. Creativity (2:7s) (16 of 16) was possible, as well as enjoyment (2:8s) (16 of 16) and the pursuit of information to kill time (2:10s) (14 of 16).

The twelfth themed matrix invited responses to statements which engaged with disciplinary perspectives directly. The panel largely agreed that both research and practice arms of the discipline tend to “focus on the moment” (12:10s) (12 of 16), despite earlier agreement that “information has different meanings to the same person over time” (1:11s) (15 of 16). A gap was therefore acknowledged. This focus on the moment translated into a disciplinary desire to be current, which itself, it was agreed, led to a disregard of the cultural-historical dimension in which LIS exists (12:11s) (12 of 16).

The philosophical or ideological details of how the panel members actually view information or information seeking were incidental to the exercise. What is interesting is the notion that they might view it differently from the objects of their enquiries (i.e. those who might employ Slow in practice), and that this might be a barrier to a Slow perspective within LIS. To further discuss this, a statement was selected to explore the panel’s view:

12:1s: Information professionals and researchers have a different view of what information is to that of the people engaged in its seeking and use who constitute the object of our services and research

The largely positive response to this statement in Round Two implied a burgeoning consensus and little room for discussion, but a large enough minority (3 of 16) strongly disagreed and this was felt to warrant further discussion. Moreover, the nature of the statement invites discussion even within consensus because it is about differences of opinion and understanding.

3.9.3.2 Area 2: information literacy

The next four areas develop ideas of mismatch or barriers between LIS & Slow, and begin to explore implications.

This particular area explores one element that a Slow perspective can foreground, namely information literacy, and addresses the impact that a Slow lens might have on the facilitation of effective information use. Given that the discipline, as represented by this panel, feels that it views information differently to those people involved in seeking, it follows that there may be issues with notions of literacy which stem from that discipline but which nevertheless seek to help those people. There may be a mismatch here too where methods of achieving information literacy are designed with the disciplinary view, rather than the real view, in mind. This could ultimately be used to argue that a user-generated strategy for information literacy (e.g. a Slow strategy) is likely to be more appropriate or effective than one that comes from a discipline view of the issues. Slow is presented as a hypothetical means of attaining information literacy.

The Slow perspective of information literacy is specifically understood to be the capacity to effectively manage the speed and volume of incoming information. It highlights these aspects of contemporary information provision as problematic and potential barriers to information literacy. It is not necessarily about search,

locate and evaluate, although it is about critical awareness and conscious decision-making as is the case in some other definitions.

A number of statements skirted around the issue of literacy, and in particular the issue of framing questions. This is often cited as a key step in information literacy. The panel mostly disagreed that information seeking is distinct from the processes of framing questions and learning (2:1s) (12 of 16). This implies that effective information seeking, or in other words, being information literate, starts with asking the right question in the first place or perhaps knowing what it is that is being sought. It does not address how to manage incoming information effectively, and as such is a relatively task-based view.

The information culture in which Slow operates is not task-based but there were no statements to address everyday literacies in particular. In order to further explore the nature of information literacy according to this panel, the following statement was taken forward:

2:12s: Information literacy is about being selective and critical

The majority of the panel agreed with this statement (11 of 16) but a significant number did not: this was surprising given its seemingly uncontroversial assertion. This disagreement was the subject of further elaboration and the panel were asked to consider what they understood by the term “information literacy”.

3.9.3.3 Area 3: speed & scale

This area ties closely with literacy and in many of the statements which address speed and scale, notions of effective and efficient information use were also considered. The implications of speed and scale are important because Slow interacts with them. Slow in non-information contexts problematises these attributes of contemporary life and seeks to regain control of them as individual issues and as a combined debilitating force.

The panel mostly agreed that the “speed of access to information and an unlimited choice of sources are independent issues” (6:3s) (13 of 16). This is likely to stem from the idea that the two elements derive from different parts of the information landscape. The tempo of information seeking is user-centric (7:21s) (12 of 16) rather than information-centric, but the quantity of information is a cumulative characteristic of the information itself. This is reflected in the panel mostly agreeing that “information cannot itself be fast or slow” (1:9s) (11 of 16). However, some disagreement was returned as to whether frequency of updates might actually constitute an informational speed (5 agreeing, 7 disagreeing and 4 responding neutrally).

In a more abstract sense, it was agreed that time is relevant to information behaviour (7:1s) (15 of 16), although some discussion ensued regarding which view of time is most prevalent and relevant in LIS (especially matrix 11). Tempo was perceived as variable by the majority of the panel (7:20s) (12 of 16) and a potential area of Slow focus (13:10s) (14 of 16) and (13:11s) (15 of 16).

The panel considered whether they felt that increasing speeds and volumes of information delivery was a reality, and whether that reality constituted a problem to be addressed. The overall feeling was that “life is getting faster” (7:8s) (13 of 16) and that keeping up with developments was a real and present pressure (7:9s) (16 of 16). However, the panel also largely agreed that “unlimited choice causes more anxiety than speed of access” (6:5s) (10 of 16) and so increased speed, general and informational, though real and experienced, was less of a problem than the quantity of information available.

Possible repercussions of the combined effect of speed and choice were considered. The major outcome discussed was overload and generated enough material to warrant its own area and Round Three statement (to follow). Several possible outcomes of an increased speed and scale of delivery were considered. These were: reflective information absorption being sidelined (6:7s) (12 of 16 agreed); different information choices being made than would otherwise happen (6:8s) (11 of 16 agreed); an understanding of what knowledge is in a particular domain being sidelined (6:9s) (12 of 16). These were framed as neutral-value judgments which would allow for further

elaboration on whether these were benefits or disadvantages of acceleration and proliferation.

Having ascertained that the panel largely felt speed and scale were areas to be addressed, the following statement was selected for further exploration:

6:8s: An increased speed and scale of information delivery may lead us to information choices which we would otherwise not make

The responses were spread across all possible levels of agreement which suggested a variety of opinion. The positive or negative interpretations of this statement would provide a contrasting set of elaborations. Furthermore, this statement ties together notions of information literacy (knowing which choices to make) and notions of overload (speed and scale preventing us from doing so).

3.9.3.4 Area 4: overload

From a disciplinary point of view, acknowledging overload problematises the elements of speed and scale. It brings together most of the elements being addressed (speed + scale = hindrance to information literacy in the form of overload) and it is the disciplinary view of this over other areas that may illustrate the possible tensions between LIS and Slow, as well as suggesting Slow's main areas of application. This area continues to explore the contributory research question by considering the discipline's potentially mismatched view of the issues, and in so doing it also considers the main research question of this phase: what are the implications of a Slow perspective in this field?

As with speed and scale, there was some discussion of whether information overload is an issue at all. The majority of the panel agreed that it has "implications for everyday information interactions" (3:13s) (15 of 16) and also felt that it is not a neutral phenomenon (3:1s) (13 of 16). A belief that it does exist (and can be problematic) was evident. Furthermore, its effects "are likely to be influenced by the value system in which an information user exists" (3:9s) (14 of 16) which implies the social or cultural level at which overload could be

said to operate. This point was eventually deemed the most useful for further elaboration.

Working towards its level of operation, the panel considered where overload originates: does it stem from the speed of information, the scale of information or both combined? No clear perspective emerged, with the majority of the panel agreeing that it is related to the two elements as a single phenomenon (3:7s) (10 of 16) and that it can also be related to them separately (3:8s) (10 of 16). The remaining panel members were divided between responding neutrally and disagreeing with each statement, so a clear picture is impossible to determine.

Discussion also included consideration of possible repercussions of overload. These responses were largely intuitive (i.e. how the panel felt about things) rather than being based on empirical evidence. The need for empirical investigation was raised by some panel members (#9; #11) and a higher proportion of responses were neutral, reflecting the unknown aspects of this area. Nevertheless, a sense emerged that people's information behaviour is likely to be affected by overload, the avoidance of information being one such repercussion (3:19s) (10 of 16). Avoidance in the form of "disconnecting from technology and from information" was deemed to sit outside the mainstream of behaviours (3:17s) (12 of 16), although 'mainstream' was undefined during the course of the exercise.

The reach of overload was also considered, most of the panel agreeing that it can affect behaviour when the information user is either actively seeking information (3:21s) (13 of 16) or passively receiving unwanted information (3:20s) (9 of 16). The relatively low agreement with the latter statement implies that overload is a user-centric concept that occurs experientially during the information seeking process, rather than something that exists outside of the information user's perspective. This is reiterated by the consensus achieved in all statements relating to overload being context dependent: its effects depend on the personality (3:10s), situation (3:11s) and time constraints (3:12s) of the individual concerned (15 of 16).

The nature of overload affects whether and how Slow relates to behaviour generally, and information behaviour in particular. For Slow to have a specifically informational application, the nature of overload should be established and this was taken forward as the panel's area of focus for Round Three. The statement which was deemed to best open this up was:

3:2s: Overload is a societal phenomenon rather than a specifically informational one

There was a spread of response in this round, with most agreeing that this was the case (9 of 16) but a significant minority tending to disagree (5 of 16). There was one neutral response and one decline. The panel were asked to think about what they understood by the term 'overload' and it was hoped that this would invite consideration of the term, the phenomenon itself and, consequently, whether a management strategy rooted in everyday social behaviour would have a specific application to information behaviour.

3.9.3.5 Area 5: consumerism

The first four areas identified are concerned with abstractions of the issues at hand, that is, they deal with elements of the Slow information paradigm without addressing it directly. The first looks explicitly at differences between discipline and reality, and the ensuing sections look at three interrelated elements which might illustrate or explain those differences (information literacy, information speed and scale, information overload). The fifth area of interest turns more overtly to an issue at the root of a Slow perspective, namely consumerism.

Slow in general terms can be described as critical consumerism and elements of this were introduced in the original positional Delphi paper. A wealth of material was generated on this subject in ensuing rounds and in this round, the panel considered a number of ways in which consumerism relates or is in contrast to information behaviour and its study. This was perhaps the most controversial area because most of the panel had not considered these issues before and were therefore exploring their perceptions of them for the first time.

The results are therefore illustrative and subjective, rather than concrete reflections of the disciplinary stance. Indeed, the discipline is unlikely to have anything approaching a unified stance on this.

A Slow approach foregrounds *critical* consumerism, which assumes that consumerism is something to be problematised and actively considered. This was identified as an important aspect of the area to take forward, but other contrasts emerged during the panel's consideration. The key was subtlety of language, for example the difference between 'consumerism', 'consumption' and 'commercialism' (all of which were represented in separate sub-sections in this theme matrix). In distinguishing between these terms, the panel agreed that information, and information behaviour, is sometimes commercial (5:14s) (14 of 16) and, relatedly, that information sometimes has an economic context (5:15s) (15 of 16). This is evident in commercial databases and other subscription based information sources such as newspapers. The panel also largely agreed that increasing commercialisation of knowledge "is likely to affect an information service's capacity to serve the needs of users" (5:16s) (13 of 16). Whether negative or positive, this affect was deemed important by the panel who felt that it made sense "to distinguish between commercial and non-commercial information sources" (5:19s) (14 of 16).

It is likely that different interpretations of the word 'consumer' influenced the panel's various responses to these statements, and this is one reason why they were divided into the three sub-sections. In attempting to unravel these interpretations, the panel agreed that "the information user is more than just a consumer of information" (5:3s) (15 of 16) but that the "information user is often implicitly conceptualised as a consumer within LIS" (5:1s) (11 of 16). This suggests a limiting and limited perception of the information user. The majority of the panel also agreed that the ways in which the user is framed within LIS are important (5:5s) (11 of 16). An assumption of a Slow approach is that use of the word 'consumer' is value-laden and implies an attitude to information seeking that a user may not have in a given situation: further elaboration on this point was deemed necessary to explore the disciplinary perspective. The statement selected was:

5:2s: To call information users ‘consumers’ simply denotes that they consume information: it is neither positive nor negative

Consideration of this statement was likely to encourage thoughts about implied conceptualisations in the field, and about the value-judgments which might underlie linguistic choices. This had also been addressed in statements which considered the use of positive language for those who actively seek information (e.g. monitors) and the corresponding negative language used for those who don’t (e.g. blunters) (12:7s).

3.9.4 Summary of key statements

The five statements taken forward to Round Three were selected as representative of the key emerging themes and original research concerns. They were deemed to warrant further elaboration, either because of different levels of agreement in Round Two or because they represented a contrasting perspective to Slow. The five statements were:

- Information professionals and researchers have a different view of what information is to that of the people engaged in its seeking and use who constitute the object of our services and research

- Information literacy is about being selective and critical

- An increased speed and scale of information delivery may lead us to information choices which we would otherwise not make

- Overload is a societal phenomenon rather than a specifically informational one

- To call information users ‘consumers’ simply denotes that they consume information: it is neither positive nor negative

3.10 Round Three

3.10.1 Consideration of key statements

The panel were sent a set of 5 response sheets. Each statement was reiterated alongside the numbers of panel members agreeing or disagreeing. The individual panel member's response was highlighted for each one, and any initial comments they had made in Round Two were also reiterated. This resulted in each panel member receiving a unique response document. They were invited to reconsider the statements in light of the total responses, reconsider their own response and interpretation of the statement and then elaborate on their thinking.

The response window for this round was short in comparison to previous rounds (4 weeks). A longer period was deemed unnecessary since the majority of responses in previous rounds had arrived in the final week. The abbreviated timescale was suggested to and accepted by the panel. Flexibility from both sides of the process was a feature of the Slow Delphi, most notably developed during the negotiation of statements after Round One.

The participants' responses to Round Three are detailed in Appendix G.

3.10.2 Elaboration & revision of position

Providing the panel with an opportunity to think more intensively about a selection of statements and reflect on their original responses was intended to have two effects. Firstly, it was intended to generate further material and discussion on the key points, by encouraging the panel to elaborate and explain the reasons for their original level of agreement. This is in line with traditional Delphi progress. The second intention was to allow the opportunity for revision of position. This too is in line with traditional Delphi objectives and constitutes one of the crucial elements of the process. Without the opportunity to reflect and

digest other opinions, a Delphi could be described as a self-perpetuated survey. It is this iteration and revision that marks out the process.

There were few, but at least some, revisions which occurred as a result of this reflection time. “After some thought” one panellist (#6) shifted substantially from tending to disagree to tending to agree about the nature of overload, and another similarly shifted in relation to the impact of speed and scale (#5). Another panellist shifted more subtly from strong agreement to a tendency to agree about the constituent skills of literacy (#4). These changes of opinion were only possible through the iterative and reflexive nature of the Delphi, and enrich the resultant material in otherwise unachievable ways.

Providing a full response document to the panel also allowed each participant to see other opinions and assess their own in light of that information. This could well have combined with the contemplation time to produce the above changes of opinion, and certainly confirmed opinions in the case of at least one panellist (#4). In acknowledging their minority perspective of the effects of speed and scale, they used the elaboration exercise to explain precisely why that view seemed the most appropriate for them.

3.11 Discussion of output

It was decided that this would be the final round in the Delphi process as participants began to respond. The objective was not consensus so there was no definitive end point for the iteration automatically built in to the structure of the study, and so one was created at this stage. The range of opinion, and the revisions of position, demonstrated that key aims had already been met. The panel had provided their thoughts and perspectives on the core elements of the project, several had changed their minds upon reflection and material had been generated to tie the conceptual work of previous chapters with the real-life situations and perspectives to be explored in subsequent work.

The analysis and ensuing discussion of this round constitutes a qualitative summary and interpretation of the panel's responses within the 5 statement framework of the Round Three documents. As stated above, the collated Round Three documents are available in Appendix G.

Through this assessment, a picture of disciplinary perspectives can be built and the second research question can be addressed.

- What, if any, are the implications of a Slow perspective for the study and theory of information behaviour?

The impact of Slow on the study of information, that is, Slow as a methodological lens can be explored here. Moreover, tentative ideas about the impact of Slow as an approach to information use can be outlined. The analysis will look at each statement in turn, and will be based directly on the responses given by the panel, the result of this approach being a narrative commentary, using the participants' own words where appropriate.

3.11.1 Statement One

- Information professionals and researchers have a different view of what information is to that of the people engaged in its seeking and use who constitute the object of our services and research

In considering this statement, the Delphi panel explored the gap that lies between a field of study and the objects or situations it investigates, observes and documents. This emerged as an area of interest in Round Two of the Slow Delphi (3.9.3.1, pp. 164-166) and was taken forward as representative of the possible gap between theory and practice.

Exploration of this statement was not intended to initiate an introspective wallow through the internal perspectives of the field, and indeed the panel did not contribute in this way. Rather, initial 'level of agreement' responses were reflected upon and explained in short paragraphs. This led to the proposal of a variety of reasons *why* the discipline views central concepts differently, and also the repercussions that this difference may have on designing research and on the recommendations made as a result.

In terms of the contributory research question, exploration of this statement looked at the underlying tension between theory and practice. How a Slow perspective might impact on the theory and study of information behaviour is affected by these underlying concerns, since they influence and are influenced by the approach taken towards research. The ways in which objects of study are framed impacts on the ways in which research is designed and conclusions are drawn. A Slow perspective might therefore be perceived as incompatible with existing theories of information behaviour if it engages with conceptions in a fundamentally different way.

The initial point to reiterate about the contributions to this statement is that of 16 panellists, 3 strongly disagreed that there is a difference of perspective about the concept of information. One reason for disagreeing was that in order to provide a service, the LIS professional's "view on information has to be close to that of the user groups they serve…otherwise their service will be of no use to

them" (#9). This was emphasised by the assertion that "what information is depends on the practice (situated activity system) within which people act" (#13) whether they are user, professional or researcher. Any difference in conception therefore rests on the context, and not the stakeholder.

Another more definitive reason for disagreeing with the statement was offered by the third dissenter who saw "no indication that there is an inherent disagreement about the definition of the concept 'information'", nor that every researcher within the discipline had a particular definition with which they worked (#5). This was reiterated by other panellists who strongly agreed, or tended to agree, with the statement (#3; #14). The opinion that 'information' can encompass any and everything for a researcher renders it "almost useless as a word" (#3) and this echoes the view that there is no shared, or indeed contested, definition for it.

The majority of the panel (12 of 16) agreed that information professionals and researchers have a different view of information to that of the people they serve or study. A number of reasons were proposed for this difference, with the general implication being that LIS is by definition distinct from the objects of its study. The notion of an "LIS community" was explicitly and independently discussed by two panel members (#1; #6) wherein researchers and professionals perceive situations in specifically information-centric ways. The definitions and conceptions "developed within the community over several decades…[do] not always correlate with how our research subjects immediately interpret the word 'information'" (#1).

A range of terms was used across other contributions to describe those outside of the field: "the public" (#1); "the populace" (#4); "information seekers" (#8); "user groups" (#9); "everyday" (#10); "users" (#11; #13); "clients, customers, patrons, real people" (#12); "people" (#15). Not all of these panellists explicitly asserted a divide between being inside or outside LIS, but use of these terms can be seen to support the implication that the field is naturally distinct from its objects of study. This distinction underlies many of the reasons given by the panel for the different perspective of 'information'.

Within LIS, and as stated above, definitions have been developed over the history of the discipline. This is mentioned in some form by half of the panellists (8 of 16). Researchers in particular “have thought about information as a concept” (#3), and base their understanding of information seeking and use on metatheoretical conceptualisations (#15). In recognising that these concepts and conceptualisations have been built up within the discipline, some of the panellists also assert that they “do not correlate” (#1) or “are not always in line” with what the public, populace or users understand what they are doing (#15).

This is seen to be for two main reasons. Firstly, it is suggested that those operating as members of the LIS community *have* to conceptualise ‘information’ in some way in order to investigate it (#1; #2; #4; #11). This may not be a conscious effort, but the traditions of the discipline underpin research in the field and so ‘information’ is much more of a concern to those who explore it. Secondly, it is suggested that those who exist outside of the LIS community are simply not aware of or concerned with defining ‘information’ (#2;#3;#11; #17). An example given is that of a “non-information professional” looking for bus timetables (#17):

> If they need to get from A to B by public transport, they do not necessarily think this encompasses an information need – more a transport need.

The distinction is emphasised by the notion that an information professional would (tend to) frame this as an information need. In pushing this observation further, it might then be said that for user, information facilitates the meeting of a need, but for LIS, information is that need.

The panellists offered a range of ideas as to what this means in terms of the scope of ‘information’ when it is defined. Some participants felt it meant that “the public” has a narrow view of ‘information’ because they had not needed to consider its potential applications (#1; #2; #3; #10; #17). In this way, for example, “advice and opinion received from informal sources” (#1), interpersonal or non-textual sources (#10) may be neglected. It was felt by some participants that this narrow view was also indicated by an instrumental

view of information that exists outside of LIS, with greater importance placed on finding it and its functionality (#3), the fact-finding elements of the process (#13) and the objects themselves (#17). However, this view was absolutely contradicted by one panel member who perceived the non-LIS view of 'information' as broader, less goal-oriented and more constructive than the view that persists within LIS (#8).

A narrowness of perspective within LIS practice (specifically librarianship) was suggested by another panellist (#11), and this can be seen to support the goal-driven agenda perceived above (#8). This perspective was seen to be reflected by a 'thing' view of 'information' within libraries, "arising from their custody of books and other 'containers'" (#11). The suggested repercussion of this view is that it influences information literacy education within those contexts so that access, rather than critical thinking or other aspects, is paramount. This will be explored further in discussion of Statement Two.

The panel's discussion of and reflections on Statement One provided an insight into the discipline, as made possible by this one group of experts. The key points to emerge were that a researcher's perspective may not correlate with the views of their participants. If meaningful and relevant enquiry is to occur it is important to understand, acknowledge and respect the participants' own conceptions. This is not a specifically Slow impact on the theory and study of information behaviour, but it underlines the issue of aligning research design with research subject.

3.11.2 Statement Two

- Information literacy is about being selective and critical

This statement was taken forward in order for the panel to reflect on what it means to be information literate. Given that the discipline, as represented by the majority of this panel, felt that it views information differently to those people doing the seeking, it follows that there may be a similar disconnect between

notions of literacy which stem from that discipline but which nevertheless seek to help those people. Task-based information literacy, where reaching a defined end-point is the hallmark of success, may dominate the disciplinary perspective because of the stage view exhibited in many existing models (as discussed in Chapter One, 1.2.1, pp. 20-32).

As also discussed in Chapter One (1.2.2, pp. 32-35), information literacy is a key element of what a Slow perspective could address. In terms of the research question, exploring this statement begins to draw Slow concerns inside the discipline, and illuminate how a Slow perspective might impact on this element of information behaviour. The panel considered a variety of contexts that exist across the information landscape which demand different literacies and strategies, in addition to a reactive and reflexive attitude. Many panellists offered definitions of information literacy, which will be discussed below. Slow information literacy would constitute a conscious and critical approach to information interaction, and specifically a conscious and critical approach to incoming or unsought information that flows within the information culture.

The majority of the panel (13 of 16) suggested a definition for information literacy, and these ranged from personal opinion (#1; #3; #10; #11) to assertions about the discipline's view as a whole (#2; #8; #10). For example, #2 outlined the definition thus:

> In our discipline, information literacy is understood as the capability of identifying what information is needed, knowing how to go about it [sic], how to evaluate the value of information found and how to use it to achieve one's goal.

In this particular definition, the similarities with process models of information behaviour are evident, as discussed in Chapter One (1.2.2, pp. 32-35). The steps here can be summarised: identifying an information need, finding the information, evaluating it and using it. The implication is that to be information literate, an individual should have the capability to execute these steps.

Several of these stages also appear in other panellists' definitions of information literacy, although the initial step of identifying a need occurs explicitly only once more: "understanding that a gap exists is the beginning of information literacy" (#6), and framing an appropriate question as a result of that forms the next step. There are three further mentions of effective information *use* being a requirement of information literacy (#1; #4; #17), although in all other responses the use of information is assumed and this, perhaps, is a reason for its relative absence. Essentially, "[information literacy] is about seeking and using information" (#15).

A greater proportion of the panel (8 of 16) mentioned the ability to *find* information as an important part of information literacy. It is described as an "ability" (#1); a "capability" (#2); one of many related skills (#10; #17); and something which should be variously learnt (#3; #6) or known (#4). According to this group then, being information literate has a focus on the search aspects of information behaviour. This also echoes the emphasis on seeking that was highlighted during discussion of existing models (1.2.1.5, pp. 25-32). A number of panellists (3 of 16) described bibliographic instruction and other general scholarly methods, such as proficiency with technology, (i.e. search and retrieval skills) as existing at the core of a 'narrow' view of information literacy (#3; #7; #10).

Half the panel (8 of 16) also mentioned the evaluation step of the definition cited above. This was often as a result of the panel member considering the selective and critical attitude described in the original statement, and 'evaluation' emerges as a combination of both, and other, elements. There are several aspects of an information encounter which require evaluating: the value of the information found and its appropriateness (#2) or, another panellist suggests, "the source and the content" (#4). It is described as a point somewhere between critical searching and selection skills (#10), or as the overarching process of information literacy as a whole (#11).

The panel therefore largely concur that the idea of information literacy is partly based on being selective and critical, as the statement suggests, with 12 of the 16 panellists in agreement. It is 'partly' based because many also state that

having these skills does not tell the whole story. For example, whilst "significant", these aspects are one part of a judgment process that constitutes information literacy (#4). They "are a couple of requirements but not all" (#5), and similarly "information literacy is not only about being selective and critical", although they are the most important skills involved (#9).

The notion of critical thinking is also invoked by several members of the panel as the root of information literacy. It entails: "making educated, considered judgments" (#3) or applying "critical thinking skills to the search for and evaluation of information" (#10). However, one panellist felt that the application of critical thinking to the seeking and use of information relies on a "deep knowledge of theoretical issues in the domain" rather than being a generic attitude which can be applied in all contexts (#11).

This idea of domain specific information literacy emerges across a number of panel responses (4 of 16). "Information literacy is not just general skills, they are also more or less domain-specific" (#7) said one panellist, where another was more forceful in stating that "one can be information literate only within a specific domain" (#13). To be information literate within a domain, a person needs the deep knowledge cited above (#11), or to be "a fully active member in a community" (#13). The skills that literacy demands are, again, not general, but "based on social activities that characterise specific knowledge domains" (#15).

What it means to be information literate in different knowledge domains was underlined by some panellists, as was the fluid nature of literacy across different contexts. The "particular opportunities and restrictions" of any given context influence which skills "are required to successfully (i.e. efficiently and effectively) access information" (# 8). Different contexts place emphasis on the importance of different skills, so that during formal or directed information seeking, the 'selective and critical' elements are brought forward. On the other hand, these skills are felt to reduce in significance during informal exploration of information, or serendipitous information encounters (#4). These contributions to the panel establish a sense of the complex and nuanced nature of information literacy.

Nevertheless, there are some responses which explicitly acknowledge the less nuanced “mechanics” (#4) of becoming information literate, for example “learning how to use information collections and retrieval tools” (#4) and “the ability to draw information from various formats” (#17). These can be seen as constituting the “general scholarly methods that are part of general information competencies” (#5) which can be applied across contexts and across domains. One panel member perceived a tendency within LIS, and in particular within “the world of practitioners”, to pay too much attention to these core skills, and in particular to teaching the use of new technologies. This, it was felt, has focused information literacy away from “critical searching, evaluation and selection skills” (#10). Another participant similarly felt that LIS tends to be interested in the application of information literacy in narrow contexts such as academic or school libraries, when it has as much relevance “in the workplace and everyday contexts” (#8).

The majority of responses to this statement were in agreement that being selective and critical are key components of attaining information literacy, but it also emerged that a complex interplay of skills, attitudes and knowledge underpin literacy in different contexts. The panel were not directed to consider information literacy in relation to any particular context, indeed several participants discussed the impact of different contexts on the nature of literacy. However, all responses assumed a context in which an individual is actively seeking information. It may have relevance in a number of contexts, but it is during the search process within those contexts where it comes into effect. One participant included reflections about informal information seeking, (#4) and one suggested the relevance of information literacy to everyday situations (#8), but a search of some kind remained in these two variations.

This project posits Slow as a means of addressing information as a fundamental part of everyday life. It assumes the accelerated flow of abundant information in contemporary developed society, and the possibility that the consequent overload hinders information literacy. The panel’s consideration of information literacy as encapsulated in Statement Two did not identify the requirement of an ability to deal with incoming or unsought information. In order to better

understand information literacy in a saturated information culture, attention should be paid to these unidentified aspects.

3.11.3 Statement Three

- An increased speed and scale of information delivery may lead us to information choices we would otherwise not make

The statement was taken forward in order for the panel to tie together notions of information literacy, in this case knowing which choices to make, and notions of overload, that is speed and scale preventing this from happening. Overload was itself looked at it in more depth during consideration of Statement Four below. The panel were invited to elaborate on their original response to the statement in light of others' views which, as with each statement, were fed back anonymously. Their contributions were based largely on personal opinion so the purpose of this exploration is not to make generalisations but root the discussion in this particular group's views.

Speed and scale are central concerns of the Slow approach and so consideration of them in specifically information-related terms allowed the panel to bring these elements together. The interaction of Slow and information behaviour has not previously been reported (see Chapter One, 1.3.3, pp. 53-62 for discussion of these key themes and information). In attempting to bring these elements together, the panel's consideration of this statement approaches the research question by aligning the central concerns of Slow (i.e. speed and scale) with the central concerns of the field (i.e. information choices). This statement explores the panel's disciplinary perspective of these elements to understand if they are of existing concern, given that a Slow perspective of the study and theory of human information behaviour would foreground them.

The majority of the panel agreed that the speed and scale of contemporary information environments has some influence on information behaviour, with all but three (#12; #13; #17) contributing discussion about the reasons and

repercussions of these elements. Two panellists (#11; #13) stressed the importance of empirical evidence to support the statement, although an insight into the disciplinary perspective is possible from the subjective contributions made. The majority of those in agreement saw the influence of both speed and scale, whilst one participant felt that “time constraints requiring people to obtain information instantly is the problem” (#17).

The effects of speed and scale were interpreted both positively and negatively by different members of the panel and, as such, one panellist (#6) felt they are of little importance to the field. The assertion behind this view was that people “might want large amounts of choices” in some scenarios, and do not seem to be intimidated by millions of search results. Other panel members felt similarly that people would sometimes seek the quickest and most expansive set of results which could, in the right circumstances, “lead to a better solution” (#4). “Careful and critical analysis” of results was described as a means of coping with such breadth of information (#8), and the range of social filters which shape the information landscape was also described (#15). Several contributions implied that people are able to cope with increasing amounts of information delivered more and more rapidly simply because there has always been too much for the human being to process and there have always been ways of rounding and filtering the situation (#8; #12; #13).

Where panellists acknowledge the increasing speed and scale of information delivery, a number of positive effects are described (#2; #3; #4; #5; #6; #8). Speed is interpreted by one participant as the instantaneity of information made possible by email, exemplified by the timely communication of potential investment targets (#2). An example of finance traders is also used by a panellist describing the negative effect of acting too quickly on what turns out to be the wrong information (#14). The range of previously unattainable information, made available through federated searches, is suggested as a positive repercussion of increased speed combined with scale (#3). Google is used by this, and one other panellist (#6), as representative of the speed and scale described in the statement. Relatedly, increased speed and scale “make it possible for people to consider choices that would have taken too much time to materialise” (#5).

An increased speed and scale of information could, as described above, be useful in different contexts. One panellist (#4) thought through the scenarios which might benefit from the presence of these elements, and those which might suffer negatively. For example, being able to obtain information as quickly as possible would be of value to someone who is pursuing a well-defined problem, and consequently has a well-defined information need, and a breadth of information would benefit someone who is seeking information informally in an undirected, exploratory manner.

The perceived negative effects of speed and scale on information choices were represented across the panel (#1; #6; #7; #8; #10; #11; #14; #17). The two elements combine to “overwhelm” the individual (#7; #8; #10) and force through “rushed” (#17) or premature decisions (#8; #14). The result here is that “the space for critical reflection” is crowded out (#11), comparison and evaluation are sidelined (#1) and “one might not make choices that are ‘selective and critical’ under the pressure of speed and volume” (#4). This response implies the importance of information literacy in the face of increasing speed and scale by referring back to Statement Two, and this is emphasised by another panellist who felt “that sheer volume and speed…[make] it rather more important that people are information literate” (#11).

Speed and scale were held by the majority of the panel to have some effect on information choices. These effects were interpreted positively by some participants (6 of 16), and negatively by a slightly higher proportion (8 of 16). All but one (#4) of the participants assumed a search process when considering the statement. The need to be information literate in these situations was emphasised by several participants, which confirms that Slow concerns have a place within the field of HIB as represented by the panel. A Slow perspective would stress the importance of acknowledging speed and scale, which have been shown to have some perceived effect on information behaviour. This has the potential to inform models of information behaviour, by reflecting the steps people may choose to take to alleviate related pressures. It also has the potential to inform frameworks for information literacy by allowing for breathing

spaces to avoid being “overwhelmed” or “rushed” during information interactions.

3.11.4 Statement Four

- Overload is a societal phenomenon rather than a specifically informational one

The panel were asked to consider the nature of overload in more depth by elaborating on their responses to this statement. In previous rounds, the panel had unanimously agreed that overload was context dependent and, by inference, a user-centric concept which stemmed from an individual’s perception of any given situation (3.9.3.4, pp. 164-166). The panellists also largely agreed that social and cultural factors were important in how overload was experienced (3:9s) (14 of 16), and so exploration of this statement was intended to encourage reflection about where overload sits in relation to the person that experiences it.

The previous statement looked at the two key elements of speed and scale in relation to information behaviour. Exploration of overload now tightened the focus still further on whether the panel perceived a particularly informational issue to be addressed. The application of Slow principles to overloaded lifestyles was discussed in Chapter One (1.3.1, pp. 49-51), but information shown as largely absent from these treatments of contemporary society. The panel were here tasked with considering whether this was perhaps a result of overload stemming from other, wider concerns. However, the assertion of this project remains that those “other, wider” concerns in the information culture are themselves information-based. In terms of the research question, this statement builds the disciplinary perspective still further to understand whether HIB and Slow are built on incompatible foundations.

Whilst 15 of the 16 panellists engaged with the concept of overload, one participant declined to comment on the basis that “overload is a fiction in the sense that people always need to make choices about what to attend to” (#12).

This contribution problematised ‘overload’ in an unexpected way which the statement did not allow for. The statement assumed that overload exists and consideration of it was intended to explore its relationship to information and society. Although this was not a widely asserted position, this relates back to responses to Statement Three which suggested that people have strategies in place for dealing with increased informational speed and scale (3.11.3, p. 180). In these responses, the influence of speed and scale, and therefore the likelihood of experiencing overload, were downplayed, and this is echoed by the “fiction” of overload here.

Information overload was discussed by many participants as only becoming a problem when some other social, cultural or political force comes into play. Specifically in work-based situations, “the lack of certain skills, organisational problems or similar” were cited as activating a perception of information overload which would otherwise not exist. Information by itself, even in large quantities, “is not perceived as overload and is quite adequately managed” (#9). “Broader cultural and social forces” (#11) were thought to have some link to the perception of information overload. The relationship between these factors was teased out by several participants and will be discussed shortly.

Where information overload was recognised, a number of panel members presented the view that it exists as one of many overloads and pressures which characterise contemporary society (5 of 16). The “ever-increasing hustle and bustle of modern-day life” (#1) was a strong description of the social condition, echoed by another panellist’s view that “today’s society is in hyperdrive” (#6). Within that society, “information overload is just one aspect of this stressful life” (#15) or “one part of the general societal overload” (#4). These contributions suggest that overload can be specifically information-related, but that its existence illustrates a more general sense of speed and scale in developed society. One participant offered this description:

> We ferry children to all sorts of lessons in order to give them some advantage in their lives compared to what we did growing up. Our 40-hour work week can stretch to 60 or beyond. Our days seems to lack ‘down time’ where in the past there seemed

> to [be] free time to play more. Reading is now something that gets shunted in when we have a few minutes. Time for contemplation seems rare.

A slightly different perspective was offered by panellists who described information-related overload as one of a range of possible manifestations. These contributions suggested that there are different ways in which overload can be experienced, but did not necessarily highlight a driving societal pressure. Some examples given were that overload can be "emotional, task-related…, or informational" (#3), or represented by "too many choices on a menu in a restaurant, too many brands of just about everything, expectations for social connections because they CAN exist" (#4: original emphasis). In the information culture, it can be argued, these examples are themselves information-based and illustrate the centrality of information to social life.

This sense of an informational foundation was supported in another panellist perspective that information is at the root of other forms of overload (#2), or at least a related element of many aspects of everyday life (#1). "Information overload seems to be a major cause of other overload[s] observed in the society", if a broad definition of information is assumed (#2). A broad definition of information would support the argument above that menu and brand choices, social connectivity, as well as emotional or task overloads, are themselves informational. It also emphasises the holistic view of information within this project, as discussed in Chapter Two (2.3, pp. 97-103).

Other panellists assumed a focused view of overload as appropriate to functioning within the LIS discipline. As one participant states, "overload in Information Science [has] to be automatically associated [with] 'information overload'" (#14). Outward facing, but similarly focused, interpretations of overload were presented by other panel members: an "abundance of 'information' and social pressure to absorb and act upon that information quickly" (#8); "having more information than one can realistically deal with" (#17).

Social pressure was well-documented in the panel responses, including those already discussed in relation to general societal overload above. The notion of an externally generated pressure which pushes someone towards overload was variously described as the demands of their social world (#2), “social expectations of workload” (#10), and a cultural obligation to “keep abreast of what is ‘happening’ in the world and be informed” (#13). It is asserted that this cultural pressure acts as “a profoundly influential moral narrative” which has been internalised as an ingrained sense of personal duty. The pressure which drives information overload in this view is externally generated and internally perpetuated.

Many of the panellists described internal or cognitive limits which would be exceeded in an overloaded state, whether that was an informational or other overload. These limits were presented in general terms: “having or experiencing too much to adequately cope with” (#3); “too many stimuli and responsibilities” (#5). Other panel members used more precise observations to emphasise these limits, such as feeling physically, intellectually or emotionally burdened to the point of being unable to function properly (#1).

The panel offered a variety of interpretations of the term ‘overload’. Most agreed that the phenomenon of ‘information overload’ exists, but where it sits in relation to an individual and in relation to other social pressures was debated. The different interpretations place information overload at the root of many other contemporary overloads, as indicative of a general societal overload, or alongside a range of equally pressing but distinct overloads. These overloads would be considered information-based in the information culture and according to several of Webster’s definitions (2.2.2, pp. 85-93). In all cases, and according to the majority of the panel, overload causes cognitive, emotional or intellectual problems.

Consideration of Statement Four allowed the panel to reflect on overload and its repercussions. The responses showed that the discipline, as represented by this group, tend towards perceiving information overload as part of the broader social condition which is characterised by hyperactivity, pressure and stress. In this sense, informational pressures derive from more general pressures. This

supports the project's hypothesis that informational pathologies (namely overload and information illiteracy) could be addressed with a framework of broader social solutions (namely Slow principles). A Slow approach to these issues rests on the assumption that information overload is an ongoing and everyday concern, and the response to Statement Four appears to support that assumption.

3.11.5 Statement Five

- To call information users 'consumers' simply denotes that they consume information: it is neither positive nor negative

In considering this statement, the Delphi panel explored the importance of terminological precision in framing objects of study. This relates back to the subject of Statement One (3.11.1, pp. 177-180), where the nature of investigating, observing, and documenting information behaviour was discussed. The variability of language used in the field was explored in Chapter One in reviewing the models, theories and metatheories which exist in HIB (1.2, pp. 20-31), and in Chapter Two in establishing this project's conceptual view of society, information, and information actors (pp. 81-115). The panel's consideration of this statement emphasised the influence of linguistic issues on the research agenda, whilst also encouraging discussion of the key Slow theme of consumerism.

In terms of the contributory research question, exploration of this statement looked at whether there is an underlying tension between consumerism, or consumerist language, and information seeking and use. This was in order to understand the implications of using such language in information behaviour research. A Slow approach would problematise the notion of 'consumer' as inadequately describing the complex role which an information actor must adopt to navigate the information culture. The 'communicator-citizen' described in Chapter Two (2.4.5, pp. 108-109) may consume information, but they may also produce it. Moreover, 'consumer' implies a fixed end-point role which does not

take how information is sought, delivered or shared into account. This can also be said of other limiting descriptors, such as ‘user’ or ‘customer’, but this particular statement was taken forward to reflect one of the roots of Slow principles.

A number of participants (4 of 16) explicitly addressed the complexities of language in their responses, for example suggesting that any value judgment “relates to the meaning of the word and suitable use of it” (#9). Using ‘consumer’ infers different meanings in different contexts. However, it was also suggested that in an information context, there is no suitable connotation of the word (#9) because it brings with it the underlying metatheories and paradigms from, for example, commerce, management or economic science (#10; #14; #15). In an information service, adopting the imperatives that these paradigms are built on can “bring some good outcomes…[but] may in fact get in the way of the agency doing what it’s mandated to do” (#10). This is because, another panellist suggests, aligning “libraries (and other public information agencies” with the economic sphere “is basically contradictory to most libraries’ mission” (#5).

Nevertheless, a section of the panel tended to agree with the statement that ‘consumer’ has no particular value, regardless of its association with what others perceived as incompatible spheres. The fact that it derives from commerce does not distort its neutrality (#9). “It is a term that describes role rather than value judgment” (#2) and “the word itself is neutral” (#6). Other panellists described situations when using ‘consumer’ was entirely appropriate to reflect the commercial aspect of some information behaviour: “with commercial bibliographic databases, or any other fee-based information services” (#1); “buying a book or video, or watching a TV, or going to the cinema, or using databases through the library” (#9). These responses engaged with the term on a largely denotative, or descriptive, level.

As one panellist stated, “terms have both denotative and connotative meanings” (#15) and the majority of participants disagreed that ‘consumer’ is without value (9 of 16). They elaborated on their original responses to describe the “loaded” nature of the term (#3) and its attendant “baggage” (#10; #11) and negative

connotations (#1; #3; #17). This relates back to the adoption of inappropriate or incompatible metatheories, paradigms and, even, ideologies (#15) through the seemingly neutral use of certain words. In one case, a participant perceived the negative connotations of ‘consumer’ to be so inappropriate to information use that they are irrelevant, and the term was therefore rendered neutral in information contexts (#17). In contrast, although the idea of consuming information was not a useful concept to another participant, they felt that the term “is clearly freighted with meaning from our broader sense of what it is to consume in the modern world” (#11).

One negative connotation which emerged was a reiteration of the instrumentality which had been criticised in previous rounds (3.9.3.1, pp. 158-161). Instrumentality here is related to both the information actor’s actions, and the information they are consuming. Using ‘consumer’ to describe information actors limits the behaviour and attitudes available to them. Rather than consume information, “they may ignore it, process it, reject it” (#8) and so ‘consumer’ describes only part a range of possible processes. Indeed, “there are so many interpretations of what consumers may do in obtaining information that just regarding it as a commodity to be consumed seems way too limited” (#4). For example, focusing on consumption “implies that there is nothing beyond the ingestion of information” (#3) and ignores a person’s production capabilities (#6; #13). It is elsewhere asserted that making this distinction is the point of using the term in specific situations, such as with health information consumers (#2).

The instrumentality of ‘consumer’ also connotes “an unreflective approach to the world” (#11) which is incompatible with the views of ‘information’ and ‘information literacy’ discussed in previous statements. As in the preceding paragraph, people do more with information than consume it: “information is considered, reflected upon, created, processed” (#12). In considering the alternatives, one participant felt that “at least ‘user’ implies something happens as a result of the information received or sought – that some use was made of it” (#3). The panel generally perceive ‘consumer’ to be an inappropriate term within information behaviour because of its connotations which, in some responses, are considered entirely incompatible with the field.

Compatibility issues aside, two panellists assert that the bringing together of seemingly disparate terminologies and imperatives reflects a redefinition of the relationship between users and libraries or other information services (#5; #10). As a result of the connotations already described, consumers in these contexts are bestowed “with a sense of entitlement about how a service ought to be delivered” (#10). A related assertion is that using ‘consumer’ “may (sometimes) indicate that information should meet their expectations as ‘consumers’ rather than meet scholarly norms” (#7). This undoubtedly has repercussions for how formal information services structure their provision for users who expect in this way, and also for how information literacy is conceived if consumer expectation influences decision-making within information behaviour.

Consideration of Statement Five served two purposes. Firstly, to understand whether there was a tension in using consumer-related language within HIB, as represented by this panel. Concerns regarding the inappropriate connotations of using ‘consumer’ and the limiting nature of the word were discussed and largely agreed upon. Secondly, this statement allowed the panel to reflect upon the theme of consumerism as it relates to their perceptions of information behaviour. This was intended to illustrate whether the pervasive qualities of consumerism which Slow addresses were evident within the discipline. Whilst the majority of the panel felt that consumerism in HIB was misplaced, there was little to suggest that it had a central role in their perceptions. A Slow approach would highlight the relationship between consumerism and everyday information behaviour, in order to reflect and explore the tension described above.

3.12 Summary

In essence, the Slow Delphi achieved the aims laid out for this section. The aims related to the research question:

- What, if any, are the implications of a Slow perspective on the study and theory of information behaviour?

This demanded an exploration of how the discipline studies information behaviour, and how centralising Slow concerns might impact upon that. The aims were:

- Build a disciplinary perspective of the key concerns of Slow
- Build a disciplinary perspective of overload
- Build a disciplinary perspective of barriers to Slow

These were met by the following objectives, encapsulated by the Delphi study in a number of ways:

- Gather opinion & illuminate dissensus
- Generate dynamic research environment
- Discussion
- Iteration
- Critical thinking

The overriding perspective as suggested by this panel is that all of these issues are context-dependent. What causes concern in one situation for one person may not be similarly problematic in another situation or for someone else. Conversely, what is beneficial in one situation may not be so in another. This allows for both speed and scale of information delivery to have repercussions in certain situations. These repercussions may be positive, but are most likely to be negative. One such negative repercussion may be a sense of overload, caused by the speed and scale of the information landscape and exacerbated by societal pressure to locate, absorb, process and ultimately use different

pieces of information as quickly as possible. This societal speed is technologically enabled but may also be driven forward by consumerism. The panel did not feel that consumerism was a root cause of overload, but there was widespread acknowledgment of its influence within LIS. This influence, most readily observed in the changing language used within the discipline, brings with it mostly negative connotations which frame the information user in an unfavourable light.

In terms of disciplinary perspective, the panel asserted that LIS necessarily views things differently: the concerns of HIB, for example, are not the same as those of the people it studies. Since Slow principles originate in society, rather than within LIS, the panel clearly felt that they would more likely be observed or studied than be adopted as a research approach in their own right. However, another assertion was that the attitude of professionals, researchers and users in any given context would have to correlate if the service or research was to be successful: in the context of overloaded speed and scale, perhaps Slow could provide a common approach to the navigation of the information culture and alleviation of overloads.

Foregrounding speed and scale as relevant in LIS might have the following repercussions for the research agenda: attention to context, attention to everyday practices and ‘passive’ information receipt, attention to the encroachment of information on all areas of modern life (a reemphasis of the Information Society), attention to the tempo at which people seek information and the effect that this has on their success, attention to the objective and subjective facets of overload and the ways people alleviate this at personal and institutional levels.

3.13 Introductory Slow discussion

In a section as yet undiscussed in detail, the panel considered the potential for Slow in information contexts and within the discipline. As a largely hypothetical section, a higher proportion of panellists felt unable to comment on these statements than those discussed in more detail throughout this section. The results here are not comprehensive, but they can be used to illustrate some possible real-world applications of Slow. These potential Slow sites and outlets mirror the issues already discussed and start to link to the real world.

For example, the panel reached consensus that Slow was likely to highlight the value judgments being made within LIS by problematising and foregrounding the impact of speed and scale (13:12s) (12 of 16). Since context is key, it follows that these are not always going to produce the best results in information seeking and use but LIS tends to frame or accept them as universally beneficial. Moreover, the panel agreed that Slow is likely to emphasise the existence of different tempos of information seeking in different situations (13:11s) (15 of 16).

Slow seemed to be a user-centric concept to most of the panel who felt able to comment about it (13:4s) (8 of 12, 4 declined) and this may be why they did not perceive it as a useful information research lens. It is more likely to exist in personal processing styles and strategies (13:2s) (10 of 12, 4 declined) than in any overarching disciplinary or metatheoretical sense. Having said which, there was majority agreement that Slow demonstrates the potential to be used as a framework for information literacy (13:7s) (11 of 13, 3 declined) which implies an overarching, or certainly institutional, approach based on Slow principles. There is potential for it to be used in this broader sense.

The panel perceived difficulties in applying Slow principles in this broad sense, perhaps because of the basic incompatibility between them and the instantaneity of many emerging social technologies (13:9s) (7 of 13, 3 declined). The inherent speed of emerging technologies is likely to prevent or even make redundant the adoption of a Slow attitude. This centralises these technologies in

the information landscape and, to some extent, represents a determinist perspective. The majority of the panel disagreed or declined to comment on this statement so the discipline, as far as it is represented here, probably tend more to a constructivist view of technology.

The panel also agreed that whilst desirable, the application of Slow in the real world is nigh on impossible. In other words, it's a 'nice idea'. It would require a fundamental change in society to shift emphasis away from speed and choice, notably in the working environment. Slow isn't really about this. It's about a focus on speed and choice as options in the search process or in the receipt of information, not as absolutes or guarantees of success. It is also about a person's individual context within society and the power they have (in a consumerist environment) to choose those options according to need and not be swayed by dominant societal forces. Idealised and not always possible, perhaps, but the thrust is individual responsibility and choice that a Slow approach centralises. It is difficult to imagine this happening in an information culture dominated by instantaneity, and is likely to be a difficult strategy to adopt.

The areas that were highlighted during the Delphi process were deemed to have relevance to the wider world. The areas of Slow potential were also outlined as potential research sites. The project's focus now looked to 'real' people who have adopted Slow strategies in their lives to further explore the gap between discipline and reality, and to examine what, if any, Slow information behaviours exist. It is likely that some people, in some contexts, have taken a Slow approach to information and done precisely what the panel deemed difficult.

3.14 Chapter Three references

Baker, D. (2006) 'Digital library futures: a UK HE and FE perspective', *Interlending & Document Supply*, 34 (1), pp. 4-8.

Baruchson-Arbib, S. & Bronstein, J. (2002) 'A view to the future of the library & information science profession: a Delphi study', *Journal of the American Society for Information Science & Technology*, 53 (5), pp. 397-408

Charmaz, K. (2006) *Constructing grounded theory: a practical guide through qualitative data analysis*. London: Sage.

Dalkey, N.C. (1972) 'An elementary cross-impact model', reprinted in Linstone, H.A. & Turoff, M. (eds) (1975) *The Delphi method: techniques & applications*. Reading, MA: Addison-Wesley Publishing, pp. 327-337.

Feret, B. & Marcinek, M. (1999) 'The future of the academic library and the academic librarian: a Delphi study', *Librarian Career Development*, 7 (10), pp. 91-107.

Feret, B. & Marcinek, M. (2005) 'The future of the academic library and the academic librarian: a Delphi study reloaded', *New Review of Information Networking*, 11 (1), pp. 37-63.

Fisher, K.E., Erdelez, S. & McKechnie, L.E.F. (eds) (2005) *Theories of information behavior*. Medford, NJ: published for the American Society for Information Science & Technology by Information Today.

Gillespie, D.N. & Green, R.A. (2001) 'Assistive technologies in academic libraries: a preliminary study', *Libraries & the Academy*, 1 (3), pp. 329-337.

Glaser, B. (1978) *Theoretical sensitivity*. Mill Valley, CA: Sociology Press.

Glaser, B. & Strauss, A. (1965) *Awareness of dying*. Chicago: Aldine Publishing.

Glaser, B. & Strauss, A. (1967) *The discovery of Grounded Theory: strategies for qualitative research*. London: Weidenfeld & Nicolson.

Green, J.W. (2000) 'Delphi method in website selection: using the experts', *Reference Librarian*, 33 (69/70), pp. 299-310.

Heath, H. & Cowley, S. (2004) 'Developing a grounded theory approach: a comparison of Glaser & Strauss', *International Journal of Nursing Studies*, 41 (2), pp. 141-150.

Helmer, O. (1975) 'Foreword', in Linstone, H.A. & Turoff, M. (eds) *The Delphi method: techniques & applications*. Reading, MA: Addison-Wesley Publishing, xix-xx.

Howze, P.C. & Dalrymple, C. (2004) 'Consensus without all the meetings: using the Delphi method to determine course content for library instruction', *Reference Services Review*, 32 (2), pp. 174-184.

Hsieh, L.F., Chin, J.B. & Wu, M.C. (2006) 'Performance evaluation for university electronic libraries in Taiwan', *Electronic Library*, 24 (2), pp. 212-224.

ISIC (2012) *The aims of ISIC.* Available: http://informationr.net/isic/aims.html (Accessed: 22 June 2012).

Keller, A. (2001) 'Electronic journals: a Delphi survey', *INSPEL*, 34 (3/4), pp. 187-193.

Kim, Y.H. & Kim, H.H. (2008) 'Development and validation of evaluation indicators for a consortium of institutional repositories: a case study of dCollection', *Journal of the American Society for Information Science & Technology*, 59 (8), pp. 1282-1294.

Kuusi, O. (1999) *Expertise in the future use of generic technologies: epistemic & methodological considerations concerning Delphi studies*. VATT-Research Reports, 59. Helsinki: Government Institute for Economic Research.

Landeta, B. (2006) 'Current validity of the Delphi method in the social sciences', *Technological Forecasting & Social Change*, 73 (5), pp. 467-482.

Linstone, H.A. & Turoff, M. (1975) 'Introduction', in Linstone, H.A. & Turoff, M. (eds)

The Delphi method: techniques & applications. Reading, MA: Addison-Wesley Publishing, pp. 3-12.

Ludwig, L. & Starr, S, (2005) 'Library as place: results of a Delphi study', *Journal of the Medical Library Association*, 93 (3), pp. 315-326.

Macevičiūtė, E. & Wilson, T.D. (2009) 'A Delphi investigation into the research needs in Swedish librarianship', *Information Research* [online], 14 (4). Available: http://informationr.net/ir/14-4/paper419.html (Accessed: 22 June 2012).

Nicholson, S. (2003) 'Bibliomining for automated collection development in a digital library setting: using data mining to discover web-based scholarly research works', *Journal of the American Society for Information Science & Technology*, 54 (12), pp. 1081-1090.

Passig, D. (1997) 'Imen-Delphi: a Delphi variant procedure for emergence', *Human Organization*, 56 (1), pp. 53-63.

Saunders, L. (2009) 'The future of information literacy in academic libraries: a Delphi study', *Libraries & the Academy*, 9 (1), pp. 99-114.

Strauss, A. & Corbin, J. (2008) Basics of qualitative research: techniques & procedures for developing grounded theory (3rd edn). London: Sage.

Tapio, P. (2003) 'Disaggregative policy Delphi: using cluster analysis as a tool for systematic scenario formation', Technological Forecasting & Social Change, 70 (1), pp. 83-101.

Turoff, M. (1975) 'The Policy Delphi', in Linstone, H.A. & Turoff, M. (eds) The Delphi method: techniques & applications. Reading, MA: Addison-Wesley Publishing, pp. 84-101.

Zins, C. (2003) *Knowledge map of Information Science: issues, principles, implications* [online]. Available: http://hw.haifa.ac.il/human/hebrew/ISMapWeb.htm (Accessed: 22 June 2012).

Zins, C. (2004) 'Knowledge organization: an epistemological perspective',

Knowledge Organization, 31 (1), pp. 49-63.

Zins, C. (2006) 'Redefining Information Science: from 'information science' to 'knowledge science'', *Journal of Documentation*, 62 (4), pp. 447-461.

Zins, C. (2007a) 'Conceptions of Information Science', *Journal of the American Society for Information Science & Technology*, 58 (3), pp. 335-350.

Zins, C. (2007b) 'Conceptual approaches for defining data, information and knowledge', *Journal of the American Society for Information Science & Technology*, 58 (4), pp. 479-493.

Zins, C. (2007c) 'Knowledge map of Information Science', *Journal of the American Society for Information Science & Technology*, 58 (4), pp. 526-535.

Zins, C. (2007d) 'Classification schemes in Information Science: twenty eight scholars map the field', *Journal of the American Society for Information Science & Technology*, 58 (4), pp. 645-672.

4. Chapter Four
The focus group

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The focus group

4.1 Introduction

The focus group was employed as a qualitative research tool to explore how the key areas suggested by the Delphi are manifested in daily life. The intention was to illustrate lived experiences of the intersection between information behaviour, a variety of overloads, and Slow principles.

The focus group was chosen as distinct from a group interview, to emphasise the discursive and collective nature of the group process. This reflects the constructivist perspective and nature of the project, as discussed in the conceptual work of Chapter Two and shown throughout the Delphi study reported in Chapter Three.

Exploring the variety of perspectives was the desired output, as with the Delphi, and a number of themed areas were introduced to the group to structure their discussion. The moderator once more took an active role in proceedings to retain control of the session's structure, and to reiterate the constructive relationship between the researcher and the research participants. Elements of CGT were modified and applied to the study in order to provide further rigour: for example, time was built in to the session for participant-led memo writing, allowing the group to sensitise themselves to the topics at hand; constant comparison between data and analysis, and between the three forms of output which the session generated, rooting interpretation in the participants' contributions.

The focus group was devised to address what a Slow perspective means for everyday information practices. A group of Slow experts was engaged to explore the key issues, as emerged from the Delphi. These issues included whether speed is an unavoidable social pressure, and whether scale is too convenient to ignore. These related issues are represented by the third contributory research question:

- What, if any, are the implications of a Slow perspective on everyday information practices?

The focus group takes that which was discussed theoretically during the Delphi and explores whether ‘real’ experiences contrast or concur with those assertions. The Delphi panel largely perceived that a Slow attitude to information would be impractical or irrelevant, and the focus group aimed to explore this, and other, assertions. Another key aim was to encourage the participants to reflect on the role of Slow in their daily lives, to describe their experiences of pressure and overload, and to consider the relevance of ‘information’ in these areas.

The Delphi study concentrated on the applicability and implications of using Slow as a disciplinary lens through which to study and theorise about information behaviour. The focus group turns to Slow as a practical lens through which information might be approached on an everyday basis, as a means of attaining or retaining information literacy in instances of overload. As discussed in Statement One of the Delphi (3.11.1, pp. 177-180), concepts which are used within a discipline may not relate to the perceptions of participants. Therefore an initial concern of the focus group process was to allow each member of the group the opportunity to discuss their understanding of relevant terms. A number of assumptions underpinned the group, such as the notion of information overload interrupting effective information use, and these were also explored during the discussion.

The rationale and history of focus groups will be discussed, and the design steps taken to ensure consistency of method and approach will subsequently be described. This chapter then reports on the Slow focus group: its execution, analysis and discussion.

4.2 Rationale

In order to explore people's perceptions of Slow during everyday information practices, the project continued to use qualitative, and specifically constructive, research design. A focus group discussion session was the most appropriate tool in this scenario. It complements the Delphi design, by continuing to build the project's discursive and socially constructed nature.

Alternative methods, such as individual interviews or questionnaire surveys, would not have provided the same opportunities for peer interaction and discussion. The objective of the Slow study was to illustrate lived experiences of the intersection between Slow and information, as understood through collective reflection. The focus group provided these opportunities.

Devising a focus group session, rather than a group interview, was a purposeful decision designed to emphasise the interaction still further. Whilst the distinction between these methods may appear to be terminological, there are practical implications for the design and execution of the session which will be discussed in detail (4.4.2, pp. 214-217). At this stage, it is worth noting that "the focus group is not a collection of simultaneous interviews" (Krueger, 1994, p. 100), but an exercise in the social negotiation, and subsequent individual reflection, of meaning.

The social construction of meaning was emphasised by the encouragement of interaction within the group setting. As with the Delphi, a degree of social interaction was expected to engender a more dynamic process than would otherwise be possible. Focus groups are more socially constructive than group interviews, which largely follow similar paths to individual interviews: question and answer sessions led very much by the interviewer. The focus group places value on the construction of meaning among participants, encouraging them to spark off each other and think critically about their views in light of others'.

4.3 History & format

Focus groups emerged as a tool for the social sciences in the 1940s, used by Robert Merton and colleagues as a means of investigating the efficacy of wartime propaganda (1946, 1956, 1987; cited in Morgan, 1988). The focus group was used extensively in marketing so that it became synonymous with consumer research, but reappeared in the social sciences during the 1980s (Morgan, 1988). A contrasting history of the method points to Paul Lazarsfeld's early developments in market research as evidence that the focus group originated in consumer studies rather than being adopted by it (Bloor et al, 2001). Whichever route is traced, the method was developed as a strategy "in which the researcher would take on a less directive and dominating role and the respondent would be able to comment on the areas deemed by that respondent to be most important" (Krueger, 1994).

The focus group belongs to the interview family of research methods: "it is not a problem-solving session. It is not a decision-making group" (Quinn Patton, 2002, p. 385). For the purpose of this project, "a focus group is a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment" (Krueger, 1994, p. 6). There is a spectrum of understanding about how much 'interviewing' and how much 'discussing' occurs within a focus group, and this will be scoped further in a subsequent section about control (4.4.2, pp. 214-217). In this project, the method is taken to sit at the discursive end of that spectrum, and is therefore distinct from a purely interview-based technique.

A strength of the focus group, when used in qualitative research, is that "it is a socially oriented research procedure" (Krueger, 1994, p. 34). This is an advantage when the research objective is to explore perceptions and experience. The group setting is more natural than one-to-one interviews, although it is by no means a naturalistic mode of enquiry (Morgan, 1988). The format allows interaction between participants, and between the participants and the researcher. Individual interviews or survey techniques cannot provide this level of peer interaction. This may not result in the same depth of

exploration that can be gained through probing, as is possible in one-to-one interviews, but it allows for socially negotiated meaning and associations to be discussed: participants are able “to share ideas with a peer so that the two of them can build on or argue about a topic being discussed” (Greenbaum, 2000, p. 19). Moreover, there are advantages of economy in relation to both time and money which should not be underestimated (Krueger, 1994, p. 35).

Disadvantages of the method relate primarily to the complexity of organising a focus group, and the analysis of its outputs. “It can be easier to analyse the output from one-on-one research than from focus groups” (Greenbaum, 2000, p. 18). Both issues derive naturally from the fact that more people are concurrently involved in a group, and both can be addressed by detailed planning and a clear sense of what the outputs will be and how they will be assessed. These areas become problematic if the tool is inappropriate: the focus group and its outputs are appropriate to this project because its method hinges on social construction and the products of human interaction, as does the project’s methodological approach.

4.3.1 Focus groups in LIS

The focus group has been used in a variety of contexts within LIS, and most notably in relation to library and information service provision. Walden (2006) identified six themes in the literature between 1996 and 2005 which use or discuss focus groups. These were:

- Library administration
- Catalogue issues
- Focus group methodology
- Reference services
- Specific applications (in other words, miscellaneous)
- The internet and web page design

There is an established, and current, literature relating to the use of focus groups in research about academic library services. The integration of new and electronic media in academic libraries is a persistent theme (Seeholzer & Salem, 2011; Olle & Borrego, 2010) and its impact on the use of 'traditional' sources has also been the subject of discussion (Connaway, 2006). The participants in these groups represented a variety of stakeholders: librarians (Olle & Borrego, 2010; Macmillan et al, 2007), students (Seeholzer & Salem, 2011; Burhanna et al, 2009; Naylor et al, 2008; Weber & Flatley, 2008) and faculty (Carlock & Maughan, 2008; Weber & Flatley, 2006). Focus groups have also been used in the field of health informatics to, for example, ascertain clinician's perceptions of information service provision (Barley et al, 2009).

4.4 Key elements

The success of a focus group lies in its planning as much as its execution, and there are a number of key elements to consider. These are the nature of group dynamics and recruitment; the degree of structure and control; what outputs are desired, and therefore how the session is recorded.

4.4.1 Group dynamics

Groups can be exciting and productive environments in which to work, but they can also be intimidating and awkward (Krueger, 1994). If a positive tone is set by the focus group moderator and adopted by participants, such an environment can encourage self-disclosure, and probing or prompting among participants (ibid., p. 11). This self-propelling discussion needs to revolve around the researcher's areas of concern, but can reveal why people think as they do without the need for highly structured intervention (Bloor et al, 2001, p. 7). "Focusing the group discussion on a single topic brings forth material that would not come out in either the participants' own casual conversations or in response to the researcher's preconceived questions" (Morgan, 1988, p. 21).

In order to promote disclosure and interaction, careful attention needs to be paid to group composition. Whilst a variety of perspectives is necessary to generate discussion, too great a contrast in attitude or background may only result in conflict (Bloor et al, 2001, p. 20). Using pre-existing groups, such as might occur in the workplace, can provide a solid commonality to engender discussion, but can also replicate institutional or cultural hierarchies which hinder freedom of disclosure. Strangers, on the other hand, might take longer to 'warm up' in a group setting but might eventually express themselves more freely (ibid., p., 22). This is a particularly important consideration when the topics of interest are controversial or sensitive. Nevertheless, "focus groups appear to work best when people in the group, though sharing similar backgrounds, are strangers to each other" (Patton, 2002, p. 387).

The optimum number of participants for a ‘typical’ focus group is between 6 and 8 (Bloor et al, 2001, p. 26) but in reality this number can vary dramatically. Smaller groups ensure that everyone has time and opportunity to contribute, if they are willing and able, but are susceptible to cancellation or not working properly if one or two people are unable to attend. Larger groups are likely to cover a wider range of opinions and generate more varied discussion, if that is the intention, but they are more difficult to moderate and minority views are less likely to be heard (ibid., p. 27). The number of participants often ultimately depends on the logistics of who is available and who turns up (Morgan, 1986, p. 44).

The number of focus groups which constitute a study is influenced by the purpose of the study and the variability of sub-groups that are to be compared (Bloor et al, 2001, p. 28). One-off focus groups can be problematic because “you may be observing little more than the dynamics of that unique set of participants” (Morgan, 1988, p. 42). However, “the topic of the focus group interview might relate to a narrow category of people with similar backgrounds” (Krueger, 1994, p. 89) and their unique interactions may be the primary point of the focus group. Any decisions regarding numbers of participants and numbers of groups should take into account that “focus groups are labour intensive in recruitment, transcription and analysis, [and] therefore, where possible, numbers should be kept down to a bare minimum” (Bloor et al, 2001, p. 28).

4.4.2 Control: moderator & questions

The number of participants involved in any one group can determine the type and level of moderator involvement required: fewer people may need more encouragement in order for discussion to progress, while larger numbers may require greater intervention to ensure the session remains on track (Morgan, 1988, pp. 43-44). The influence works both ways: the desired role of the researcher can impact upon the number of people recruited. The researcher’s role in the process also depends on the type of discussion that is desired, which is related to the types of question asked, the format of the session and the

degree of structure that the research calls for. These all contribute to the level of control that the researcher has or wants.

As Krueger explains, using the term ‘moderator’ in relation to focus group leaders is a conscious effort to emphasise the moderation and guidance offered by this person during the group process. “The focus group is not a collection of simultaneous interviews but rather a group discussion where the conversation flows because of the nurturing of the moderator” (Krueger, 1994, p. 100). Within that role, several guises can be assumed:

- The seeker of wisdom
- The enlightened novice
- The expert consultant
- The challenger
- The referee
- The writer
- The team-discussion leader and technical expert
- The therapist

(ibid., p. 106)

Ideally, the moderator (or facilitator elsewhere: Bloor et al, 2001, p. 48) should not seek to control the group overtly but guide participants to the subjects of interest. This facilitation technique relies on experience of group processes and the ability, trained or otherwise, to anticipate, negotiate and recall contributions throughout the session. As such, focus groups of this kind are characterised by discussion, rather than interview, and in practical terms, the moderator will tend to work from a ‘topic guide’ rather than a list of predefined and rigid questions (Krueger, 1994, p. 56). Topic guides, quite literally a list of topics to be covered, appear spontaneous to participants and are flexible enough to allow the experienced moderator to adapt and re-route discussion where necessary. The topic guide approach is reminiscent of the semi-structured interview, but within a focus group setting, encourages discussion between participants rather than a sequence of individual responses.

A ‘questioning route’ provides more structure for the session in the form of a sequence of complete sentence questions. The questions are open-ended and adaptable, and they focus the discussion more precisely. A focus group with more structure can nevertheless be flexible, the moderator free to skip questions already covered in discussion, or probe emerging or unexpected topics as they arise (Morgan, 1988, p. 56).

In a topic guide approach, all questions are a form of focusing exercise which lead the participants to consider areas of interest and to discuss them (Bloor et al, 2001, p.43). Other more obviously focusing tasks can also be employed to concentrate attention on particular ideas. These include the group exercises such as the collective ranking of possible options; the use of vignettes or scenarios to illustrate certain points; and more workshop-style tasks such as creating news bulletins (ibid., pp. 43-46). Where the moderator works from a questioning route, different types of question may be built into the design in order to prompt, probe or clarify contributions. These can be loosely grouped as uncued and cued (Krueger, 1994, p. 56). A moderator is likely to have more control if working from a questioning route approach.

The focus group questioning route passes through several phases which are identified by the types of question being asked and which reflect the format of the session at large. These can be described as: opening, introductory, transition, key and ending (Krueger, 1994, p. 54). Some phases and types of question may be repeated during the session, depending on the topics to be covered and how they relate to one another. The practical format of the session depends on the quantity of questions asked, the types of question asked and the desired output (which is usually discussion). Other practical influences on format are the completion of pre-, and less often, post-group questionnaires and consent forms, as well as debriefing and summarising (Bloor et al, 2001, pp. 39-41 & p. 54-56). Whilst the aim is to generate free-flowing discussion amongst participants in order to create a focus group environment as distinct from an interview, the route should always ensure that topics are covered as necessary.

Pre-group data collection can relate to demographics (Bloor et al, 2001, p. 39), or, in marketing research, awareness of the products under consideration

(Greenbaum, 2000, p. 92). Participants may complete forms as they arrive or once assembled in the main group room. The format of the session proper depends on how much time is available and the structure of the questioning: unstructured groups might cover two broadly defined topics in a given period, and discussion would be divided between them, while more structured sessions could cover four or five topics (Morgan, 1988, p. 56). When using a questioning route, timings can be more clearly defined although they should not inhibit discussion when relevant.

4.4.3 Recording the session

Focus groups generate discussion and it is therefore the discussion that is most often recorded, usually by audio and sometimes by video means. Written responses and group recording exercises can also form part of the output, as discussed in the last paragraph of this section.

Whilst video recording a focus group may capture some of the physicality of contributions, the necessary equipment can be more invasive than that required for audio recording the discussion (Morgan, 1988, p. 62). The physical environment may have implications on the opportunity to record the session and the quality of any recording that is captured (ibid., p. 61). Many commercial and marketing-related focus groups use purpose-built facilities which allow clients and other stakeholders to observe proceedings as they unfold. This is not deemed essential in academic research and in some cases can have adverse effects (Krueger, 1994, p. 49).

Audio recordings can be analysed in a number of ways, either from a transcript which “needs to reproduce as near as possible the group as it happened” (Bloor et al, 2001, p. 61) or through a less intensive “tape-based analysis” whereby an abridged version of events is produced (Krueger, 1994, p. 143). This latter approach has come under some criticism for its apparent selective superficiality (Bloor et al, 2001, p. 59) but in conjunction with field notes, Krueger maintains that it is a practical alternative to the slow and cumbersome nature of transcript-

based analysis alone (Krueger, 1994, ix). It is certainly a more robust approach than the Krueger's alternative approaches which are note-based and memory-based strategies. In addition to notes and transcripts, proceedings can be recorded by using questionnaires. This can offer a supplementary means of triangulating opinions, but analysis should avoid quantitative interpretation given the small and non-representativeness nature of the group (Morgan, 1988, p. 63).

Another means of recording events exists in the use of flipchart-style contribution exercises. In the role of 'the writer', the moderator "spends a considerable amount of time standing up and writing on a flipchart" in order to record comments and focus the group's attention on the topic of interest (Krueger, 1994, p. 106). The interrelation between moderator role, question type and format is clear. These group sheets can act as an *aide memoire* not only to the participants as the discussion progresses but also to the moderator when it comes to analysis. There are disadvantages to this approach: physically elevating the moderator above the sitting group can imply superiority, and foregrounds the researcher in the process (Bloor et al, 2001, p.49). How much of an issue this represents will depend on the level of moderator control and structure that the group is designed to have.

4.5 Summary of the method

The focus group is a qualitative research tool, with an established history of use in the social sciences generally and LIS in particular. It provides the opportunity for participants to engage in discussion with their peers about the topics at hand, to reflect on their opinions and contribute a range of perspectives where appropriate. This variety may not be captured by other question and answer methods, such as questionnaires or structured interviews. The focus group, for the purposes of this project, is more discursive and participant-led than a group interview where the moderator may dominate. However, the moderator's role is key, and is entwined with a range of design decisions relating to session structure and how it will be recorded. These decisions ultimately depend on the outputs, or units of analysis, that the focus group is intended to produce.

4.6 Focus groups & Grounded Theory

As with the Delphi study, the focus group was not employed in order to generate theory *per se*, and yet elements of Constructivist Grounded Theory (CGT) are relevant and were influential in the process design. CGT is useful in building, understanding and verifying the researcher's interpretation of ideas alongside those of participants and, as such, helped frame some research decisions and guide analysis in relation to the focus group outputs.

Given the constructivist intentions of the project as a whole, a focus group provides opportunity for participants to engage in discussion and reflection about their experiences. This foregrounds the social and constructed nature of meaning that underlies CGT. The focus group is an exercise in interactive discussion, both between participants and between participants and researcher, and so is a fundamentally constructive exercise which highlights the interplay between researcher and researched, as is emphasised in CGT (Charmaz, 2006, p. 10).

The researcher's, or moderator's, presence and relationship to participants is active, as in the Delphi. This is to acknowledge that the process is as much to do with the verification or clarification of the researcher's perceptions as it is to do with those presented by the participants. This reflects the CGT assumption that "we are part of the world we study and the data we collect" (Charmaz, 2006, p. 10). By adopting a methodological approach which hinges on social constructivism, there would be no value in removing the researcher from the techniques or methods employed. According to CGT, the researcher's existing theoretical knowledge and perceptions guide the research design and thus their role in the process must be activated. This does not, however, equate to domination of proceedings which may generate forced discussion. Structure was provided, but participants were then encouraged to explore that structure for themselves and construct their own meanings within it.

Elements of the session, notably the recording exercises, were devised as participant-led memo writing and focusing exercises which allowed the group to

explore concepts and sensitise themselves to the topics at hand. These elements will be further discussed during more detailed explanation of design choices (4.7, pp. 222-233). Further CGT techniques were used during the analysis of the focus group outputs, such as the constant comparison of data during summarisation and discussion. This comparison occurred between readings of the data and the data itself, as well as between the three sources of data which were generated (audio, individual recording sheets, group recording sheets).

It is acknowledged that the use of these elements, and the fundamental influence that a CGT perspective may have had on the focus group design, does not amount to a comprehensive CGT approach. Indeed, the intention was not to develop the project as such. Nevertheless, being aware of CGT ideas ensured that the research design was appropriate to the overall constructivist approach of the project, and that both researcher and participants were afforded the opportunity for reflection and interaction. This awareness also assisted with a consistency of analysis between the focus group outputs and the Delphi, although it is also acknowledged that the outputs of the two studies varied greatly in nature and in substance.

4.7 Design steps

The aim of the Slow focus group was to shed light on the implications of Slow in practical information terms. As has been shown, the focus group was appropriate to the task for several reasons: it is qualitative, it is constructive and its outputs can be analysed using methods similar to those described in CGT guidelines, namely constant comparison and iteration.

The planning of this Slow focus group attended to four interrelated design features and steps. These were:

- The anticipated outputs or units of analysis, and how the session would be recorded in order to generate these
- The format of the session, with particular attention to the researcher's role and question route or topic guide
- The selection of participants
- The logistics of execution

4.7.1 Recording & outputs

To design the recording of the group, particular attention was paid to the research question being addressed. This brought clarity to what was being explored, and how that exploration would be achieved. The research question here was:

- What, if any, are the implications of a Slow perspective on everyday information practices?

These implications would be as perceived by people who might engage in Slow information behaviour, not an objective interpretation of them, and they would be built and contested by social interaction in a group setting. So, the desired output was perspectives that had been generated and appraised in light of others' opinions, as in the Delphi. These perspectives would be in the form of utterances and statements. Whilst the normative elements of the discussion of

the group setting would be an interesting tangent, (Bloor et al, 2001, p. 4), it was not within the scope of this study (i.e. *how* people arrive at their perspectives). It is an assumption, rather than an investigation, of this project that people construct their understanding of phenomena through their interactions with others. Giving participants the opportunity to think critically would have an impact on the perspectives that were ultimately captured.

Since normative elements were not the focus, the discussion of this particular group was not to be analysed in a discourse analytic style. Bloor et al (2001) describe the steps and techniques that might be used in such an approach when the objective is to access norms and values. The objective of this particular group was to gather opinion. Therefore the session would be audio recorded with a view to its analysis being 'tape-based', as per Krueger (Krueger, 1994, ix). Pertinent and relevant comments would be extracted from this recording, with constant and consistent contextualisation with other sources of written data, to be discussed.

Context would be provided by field notes (taken when possible during the group), collaborative lists (generated during the group amongst participants) and individual record sheets (written at allocated points during the process). These additional recording mechanisms would allow for a qualitative triangulation of opinion and largely participant-led data capture. This remains true to the focus group principle of the researcher blending into the background, but also allows for a fairly defined structure to be implemented by segmenting the session into different forms of interaction and contribution. This will be looked at in more detail during consideration of the question route.

The material output of the focus group would therefore be:

- Audio recording
    - Transcript available in Appendix L
- Field notes (researcher generated)
- Group record sheets
- Individual participant record sheets (effectively *in situ* questionnaires)
    - Transcripts available in Appendix M

4.7.2 Format

4.7.2.1 The moderator

Attention was paid to how the format of the session could support the above outputs and provide the appropriate degree of structure. This is linked to the level of researcher control. The researcher's role would be a combination of 'the writer' of Krueger's types (Krueger, 1984, p.106), and the 'facilitator' of Bloor et al (2001, p. 48). For brevity's sake, the term 'moderator' will be used to indicate this combination of attitudes and responsibilities, and the arm's length approach to controlling the session. 'Moderator' also stresses the two-way, even multiple, channels of communication that should occur in a focus group setting to distinguish it from an interview (Krueger, 1984, p. 100).

Despite the moderation at arm's length approach, a fairly overt handle on proceedings would be retained in order to encourage every participant to contribute so that individual written contributions had been thought through with other group members. This would also ensure that the areas of interest would be covered in the time available. This control would also manifest itself in the segmented format of the session.

The guiding role of the moderator would not, however, intrude upon discussion when it occurred: once questions were asked, little intervention would take place unless to probe or invite others to comment on contributions. It was hoped that the group itself would assume the role of interviewer through early encouragement of such interaction, and pointing out similarities or differences where necessary to invite further discussion. This self-interviewing would take the form of participants following comments up with others, and linking their own contributions to preceding ones.

With these points in mind, the moderator would therefore be positioned as part of the group around the table, but standing at a flipchart to record the group sheets when necessary, and retreating from the group when discussion between members occurred.

4.7.2.2 Question route

The use of a question route, rather than topic guide, was a result of several considerations. First, this focus group was intended to capture perspectives of relevant areas, rather than investigate how the group arrived at those perspectives. It would therefore be more effective to focus discussion on the key points of interest than to encourage broad discussion of related areas to see how the group reacted. There were a number of key questions that needed to be asked in light of the Delphi process, and it could not be guaranteed that the group would cover them if discussion was initiated through a more general approach.

Moreover, as a novice moderator, I felt that I needed a solid framework from which to work in this situation (as per Krueger, 1994, p. 56). Whilst I was aware of the need to adapt and accommodate unexpected tangents when relevant, I was also aware of my need to have a fairly tight guide so that I would be able to identify irrelevant tangents and bring the discussion back towards the areas of interest.

With the outputs in mind, the session required a solid structure so that there would be time for each contribution section and each subsequent recording exercise, and a defined question route would facilitate this timing more effectively. The whole session, with any pre- and post-group activities, was to take place in one three hour slot. This was deemed an adequate timeframe, and one which volunteer participants would be likely to accept.

The questions were devised in light of the Delphi findings and in light of other areas that had arisen as points of potential interest. A comprehensive list of questions that could be asked was drawn up and then sorted into topics in order to generate a framework (Morgan, 1988, p. 56). These were then divided into three areas: Slow approaches; life today; Slow & information. The first section was intended to explore how people use Slow in everyday contexts and in what kind of situation they consider it to be beneficial. The second section was intended to draw out ideas about pressure and overload in everyday contexts. The concluding section was intended to explore the role that information plays

in everyday life, whether it contributes to the pressures of section two, and whether Slow has any influence on people's interactions with it.

4.7.2.3 Piloting

The question route was piloted with a small test team in order to ascertain two things: firstly, whether the language and phrasing used was sensible and comprehensible; secondly, the types of response that could be anticipated and whether these would put the focus group proper in a position to complete the individual record sheets as we progressed.

The pilot group consisted of 3 founding members and directors of Slow Down London. This organisation is a "project to inspire Londoners to improve their lives by slowing down to do things well, rather than as fast as possible" (Slow Down London, 2012). A series of Slow events and activities have been organised by the group over recent years in order to encourage Slow principles in a city context. These include urban rambles, meditation and mindfulness training, as well as contributions to their website from Slow bloggers.

I assisted with the organisation of the first Slow Down London Festival in the spring of 2009 which provided an opportunity to forge links with the organisation for future use in this project. This assistance involved updating the event website and copy-editing blog entries during the festival.

The pilot uncovered a number of inconsistencies in the sequencing of the draft route as well as a tendency to depersonalise the questions. This depersonalisation rendered the pilot group confused as to how they were supposed to respond, rather than encouraging them to think about and discuss personal experience. For example:

- Are there situations where adopting a Slow approach is unnecessary?

The pilot group felt unnerved by this question because it implied that there was a list of situations which they should be able to identify. It was subsequently broken down and reworded to read:

- Are there situations or times when you don't want to adopt a Slow approach?
- Are there situations or times when you don't need to adopt a Slow approach?
- Are there situations or times when you can't adopt a Slow approach?

The sequencing was an issue because the draft route sometimes assumed that participants would have considered or understood certain things prior to the group session. For example, discussion about information faltered in the pilot because the questions leapt into consideration of sources and contexts without first gauging participant conceptions. This was a key topic given the Delphi findings and was reworked for the final route.

Once the questions had been pared down, reworked and re-sequenced, a session guide was devised which incorporated the questions and the different segments of the session format. Whilst devising the guide as a framework for the session, it was not intended to be so rigid as to curtail "serendipitous questions" (Krueger, 1994, p. 68) or succumb to "the fallacy of adhering to fixed questions" (Merton et al, 1956; cited in Morgan, 1988, p. 56). There were, however some mandatory elements. It was important, for example, to include an introductory welcome section to share administrative announcements, a recap of the project background, reiteration of the recording and eventual publication of materials and results, and an overview of the session to come. It was also imperative to devise an opening section, with short contributions from all participants, in order to foster a friendly and permissive environment (Krueger, 1994, p. 54). The group would be preceded by the completion of consent and demographic forms: the latter to be used in attributing comments, and also to understand the constituency of the group.

The first question section, about personal Slow approaches, was intended as a focusing exercise for the subsequent questions and as such, was afforded

considerable thinking, contributing and recording time. Since the participants would be expected to complete written recording exercises as the discussion progressed, short reflexive writing breaks were also built into the session guide. This was for a number of reasons: it would help participants understand what was required of them in the recording exercises, it would give time to reflect on topics and it would encourage contributions from around the table. Several moments of group recording using the flipchart were also built into the structure so that attention could be focused on what was being shared, and so that discussion could be regulated and punctuated in an obvious but productive way, rather than interjecting.

The second and third sections were designed with very similar patterns: a brief review of preceding sections and their relevance, an introductory remark, a short reflexive writing pause followed by contribution, group recording, discussion, and a concluding recording exercise. The whole session would be summarised by the moderator and drawn to a close with an opportunity to contribute anything as yet uncovered or to reiterate any points made earlier in proceedings. This ‘debriefing’ section would provide clear closure to the session, and encourage participants to round out their thinking on the discussion.

The full question route is available in Appendix H. This details the questions and prompts used as a structure, the segments and thinking breaks built in to the session, along with the outputs expected from each segment of the focus group process.

4.7.3 Participant selection

The selection of participants was an important consideration with a logical solution. Since “the driving force in participant selection is the purpose of the study” (Krueger, 1994, p. 87) it was necessary to again consider the desired outputs. The study was intended to gather experiences and perceptions of Slow approaches in information contexts from a practical or ‘real-world’ angle. The

assumption of this project's conceptual framework is that everyone experiences the information culture and, whilst this would be tested in the session, so this group was convened as a representation of where Slow intersects that culture. This representation would not be in a statistical sense. In fact, "in sharp contrast to the quantitative approach employed by sample surveys, participants in focus group interviews are not drawn by means of scientific random sampling techniques, that is, they are not representative of a particular universe or target population" (Walden, 2006).

Existing connections with Slow Down London provided an opportunity to invite relevant people to participate. The founders were not invited to take part because of this existing relationship, but they invited statements of interest from people who had participated in their festival and their ongoing Slow Club. These people had shown an active interest in Slow activities, and so it was anticipated that they would have much to contribute about Slow approaches. The group had to have considered using Slow as an antidote to everyday overload and pressure and so this potential pool of participants was ideal.

The founders of Slow Down London emailed their members with information regarding the project and a request for expressions of interest. From this initial invitation, three people volunteered their time. This was the seed group, from which a snowballing second stage of recruitment was initiated: relevant groups were approached via social networks (SlowFoodUK & SlowFoodLondon on Twitter and Facebook) and the same invitation distributed. From these recruitment drives, seven people were enlisted. No incentives were offered other than the chance to engage in interesting discussion and be part of this research project.

The original invitation to participate is included as Appendix I, alongside the confirmation of details sent to the seven enlisted volunteers.

4.7.4 Logistics of execution

Participants were given further information regarding the project and their anticipated participation, including a brief description of what would be expected of them. All seven agreed to take their interest further and were asked to provide details of their availability in late July and early August 2011. This was organised via the online scheduling tool, Doodle. A convenient timeslot was identified and fixed upon. The discursive and collaborative nature of the group was emphasised from the start and all volunteers given the opportunity to withdraw at any time.

The participants were given details regarding the proposed venue early in proceedings so that they could ascertain their availability. The venue was the Department of Information Science at City University as this was an easily accessed location, with appropriate facilities. The purpose and format of the group did not require specialist recording facilities: a comfortable and relatively neutral meeting room would suffice. An academic environment is not completely neutral, but the room was selected in order to reassure participants that this was not an onerous endeavour but a chance to contribute and explore any relevant experiences they wished to discuss. The room was set up as for an informal meeting with tables and chairs in a U arrangement, the flipchart and moderator's chair at the open end.

Other logistics included the provision of the different recording materials required for each output: digital voice recorder, notebooks for thinking pauses, flipchart for group sheets, individual recording packs. Moreover, it would be necessary to provide refreshments given that the group would take place over the course of an evening. Snacks and soft drinks were arranged. A colleague was enlisted to help with the arrival of participants and the completion of pre-group consent forms and demographic data capture. This would allow people to arrive at different times and feel that they were immediately involved and contributing to the study.

An overview of the session is provided in Table 2 on the following pages and more detail is available in Appendix H.

TIME	ACTIVITY	GUIDING QUESTION	OUTPUT(S)
ADMIN PHASE			
6pm	Arrival, welcome, consent and demographic forms		Consent forms Demographic forms
6.15pm	Relocation to group room		
6.20pm	Overview of session, recording, format and topics		
6.25pm	Introductions		Audio begins
INTRODUCTORY (FOCUSING) PHASE			
6.35pm	Introduce 1st section Reflection time	Can you describe an everyday situation where you adopted a Slow approach?	
6.40pm	Contributions Discussion		Group sheet
6.55pm	Recording		Individual sheets
7pm	Introduce sub-section Discussion	Don't want, don't need, can't adopt a Slow approach?	Group sheets
7.10pm	Recording		Individual sheets
TRANSITIONAL PHASE			
7.15pm	Introduce 2nd section	In which aspects of your everyday life	

	Reflection time	do you feel the most pressure?	
7.20pm	Contributions Discussion		Group sheet
7.30pm	Probing Discussion	Specific situations, characteristics	Group sheet
7.35pm	Probing Discussion	Emotional effect, reaction, alleviation	Group sheet
7.40pm	Recording		Individual sheets
BREAK			
KEY (PROBING) PHASE			
8pm	Introduce 3rd section Reflection time	Can you describe everyday situations in which you might use information?	
8.05pm	Contributions Discussion	Prompt: sources, contexts	Group sheet
8.15pm	Probing Discussion	Do any of these contribute to the pressure we have previously discussed?	
8.25pm	Probing Discussion	Specific situations, characteristics	Group sheet
8.35pm	Probing	Emotional effect, reaction, alleviation	Group sheet

	Discussion		
8.45pm	Recording		Individual sheets
CLOSING PHASE			
8.50pm	Moderator summarises		
8.55pm	Final contributions		
9pm	Close		

Table 2: An overview of the focus group session schedule

4.8 Execution

All seven volunteers attended the focus group. They were given time to read an information sheet regarding the project and the session, before being asked to complete the requisite form (detailed in Appendices J and K respectively). Relocation to the main group room occurred 5 minutes behind schedule. There was one late arrival during the first section introduction, which caused minimal delay and only minor disruption. Deep, statistical analysis of the demographics is unwarranted because of the limitations of the group, but it is important to have an understanding of the composition. This is not to imply representativeness of population but to appreciate whose opinions were captured. The sample was purposive and self-selecting.

4.8.1 Demographics

The group comprised 4 women and 3 men. Ages ranged from early 30s to mid-50s, and were fairly evenly spread across this range: 2 participants aged between 30 and 40, 2 between 40 and 50, and 3 between 50 and 60. None of the participants were born in London and all but 1 now lived in the capital. This was deemed an appropriate question to ask given the anecdotal evidence that London, and other large cities, is prone to acceleration and proliferation, and perceptions of this urban overload could be explored. 2 participants worked in the arts or cultural sectors, 2 in the public sector and 2 in IT industries. 1 participant did not specify their occupation. 5 of the participants were employed at a managerial level, or above, including one who was self-employed. The remaining 2 did not specify the level of their roles. 6 of the participants held Higher Education qualifications, including 3 Bachelors, 1 Diploma and 2 Masters. The remaining participant held GCSEs and unspecified industry qualifications.

4.8.2 The session

Discussion flowed freely between participants and it was sometimes difficult to guide proceedings to address the topics in question. This is a noted potential weakness of novice moderators who may find authority difficult to establish (Greenbaum, 2000, p. 10). It is a situation which can be particularly problematic in one-off focus groups where no subsequent studies exist to readdress topics (Morgan, 1988, p. 42). In this group session, however, the pre-planned session guide and the structure of the question route assisted in refocusing attention, as did the use of written recording sheets which emphasised the boundaries of each section and provided a useful means of bringing conversations back on track.

One negative consequence of having pre-planned recording sheets was that whilst conversation covered many related topics, participants had not always been considering the precise questions laid out in the recording sheets, so some gaps were evident in this particular output. However, the use of several recording mechanisms meant that other outputs could be used to illuminate these gaps where necessary.

The group evolved during the session so that moderator intervention was largely unnecessary during discussion phases: this is a distinguishing feature of the focus group as a method of enquiry where interaction with an interviewer is replaced by interaction with the group (Morgan, 1988, p. 18). Some participants adopted different roles within proceedings: inquisitor, regulator, and summariser. This was both useful and problematic. Whilst discussion was propelled and also reined in by the presence of such personalities, it was also sometimes directed by where these participants felt they should be heading. It was not easy to intervene and at times, a stricter or more confident approach might have managed the group more effectively but might also have limited the emerging discussion.

The outputs will now be reviewed according to the sections as they were covered, concluding with further points of interest that emerged. Quinn Patton (p. 438) describes the importance of building thorough descriptive case studies

of qualitative data before progressing to analysis. So case studies of each themed section will be built: Slow meaning and practice; Life today; Slow and information. These will use the written individual sheets as a starting point, and draw in elements of the group sheets and recorded discussion where necessary.

4.9 Analysis & discussion

A transcript of the audio recording is available in Appendix L and transcripts of the participants' individual written recording sheets are available in Appendix M. Timings from the discussion are given where appropriate in the format hour:minute:seconds.

4.9.1 Slow meaning & practice

The first section explored how the group used Slow ideas in everyday contexts and in what kind of situation they considered Slow principles to be beneficial. This was designed as both introductory and focusing in nature: to introduce the group to topics and format, and focus their attention on the practicalities of adopting a Slow approach. The question route was structured to allow discussion to lead to ideas about overload, pressure and information if the group felt so inclined. These would be taken up in subsequent sections regardless of their introduction during this first phase.

The group were asked to contribute, discuss and ultimately record situations in which they adopted what they considered to be a Slow approach. This was to develop an understanding of what being Slow meant to the group: consensus was not sought but a feature of their discussion was to work towards a common understanding.

The examples given ranged from specific moments to significant life changes; from reading bedtime stories (#2) or studying just one painting in a lunch-break (#4), to moving to a narrow boat from central London (#5). Creating the space to read was mentioned by two participants in their written contributions (#1; #2). Commuting figured prominently both in written records and in the discussion, and this was echoed by a very strong focus on workplace issues throughout the session: commuting by bus (#1), listening to podcasts whilst commuting (#7), communicating with others whilst commuting (#3). These were considered to be Slow choices that participants had consciously made. A conscious effort to shift

away from “über-consumerism” was also cited as a Slow choice (#6 @ 16:36) and engendered discussion on the subjects of quality, localism, marketing, the cultural significance of material objects and self-esteem.

The group were then asked to record the issues that they each felt had been addressed by the Slow choice that they had made. The main ideas are here extrapolated from the recording sheets. These were framed by most participants as relating to what Slow offers, rather than the issues it might address. For example:

#4: “Got me out of my head”
#3: “Better relationships”
#1: “Acceptance of where I am”
#1: “Permission to do nothing”
#7: “Gives me opportunity to muse about issues larger than my immediate self”
#5: “Moving into a ready-made community”
#5: “Access to nature” and “appreciating the seasonal changes”
#6: “Reducing my lack of appreciation for the material products I purchased”
#6 “Forced me to be more present and improve the quality of my life”

And specifically in relation to communicating with strangers:
#3: “It usually ends up in some fascinating piece of story or information being told”

Through discussion of these outcomes, participants were asked to consider how they might describe *the* Slow approach: was there some consensus within the group about what it meant to *be* Slow? The group discussed the differences of their interpretations which involved reference to personality types and, when encouraged, variations in articulation and application (29:53 onwards). There was no list of activities or attitudes which constituted a Slow approach in every situation. Indeed, for some members of the group, it was not about applying a set of principles to different decisions but about trying “to seek consciousness, presence, in a wide range of situations” (#7 @ 23:54). Nevertheless, in discussion the group also agreed that the “common theme” (#6) was being

present and being mindful, which in itself required “an awareness, seeing that things need to change” (#5). These encapsulations were illustrated further by the individual recording sheets in which each participant noted that being Slow involved being at least one of the following terms:

- Present
- Conscious
- Reflexive
- Mindful
- (Self-)aware
- Balanced
- Connected
- Appreciative

The group worked together during this initial section to build a picture of their understanding of Slow. According to this perspective, Slow can manifest itself in a variety of ways from small decisions to life choices. These were personal choices made in order to appreciate the bigger picture, and in order to attain a sense of balance within that picture. Two themes emerged from the discussion: first, being Slow is related to time and second, being Slow is related to mindfulness. The group also reflected that it was possible to be mindful of time, and this emerged as one element of a Slow approach. Interestingly, no participant related Slow to ideas about food production or consumption, which illustrates its divergent evolution as an attitude to life.

The session was here segmented by the first of two recording exercises in the first section. As described, this was used as punctuation within the session and drew the group’s attention to the key points of what had been discussed, which would lead into the next transitional phase. Having contributed, discussed and recorded when and how they felt Slow was applicable, the participants were asked to consider situations or times when they felt that they did not want to, did not need to or could not adopt a Slow approach. These interrelated areas caused some hesitancy because, as had been discussed in the preceding minutes, Slow had been identified as a general approach to life. Whilst it certainly had specific applications, for the most part it was considered by the group as a mindset rather than being more or less relevant to some situations. As one participant responded, “When would not being aware be of value?” (#1). This section was intended to problematise Slow in precisely this way, and also served to refine what the group understood by it.

After working through these uncertainties with each other, the group responded with a number of ideas about when they might not want to adopt a Slow approach. Several participants cited situations where they wanted to behave in ways counter to the Slow benefits discussed previously: “being superficial” (#7), “when I get consumerist” (#3), “mentally zone out” (#1) and in relation to “certain aspects of my carbon footprint” (#6). These can be interpreted as reacting against mindfulness, albeit in a conscious rather than mindless way. Others considered the speed element of Slow: “during certain aspects of my working life (when I’d rather quickly be done with a project)” (#5) and in “situations I don’t enjoy” (#2).

The group considered situations in which they might not need to adopt a Slow approach. This area was side-tracked by a moderator prompt which used yoga, a naturally Slow endeavour, as an example. The group’s focus veered towards activities and sports which take time to complete, such as chess, golf and cricket (47:48 onwards). These were valid contributions but skirted the areas that had been expected. Again, through probing and prompting, the group discussed the difficult phrasing of the question and began to exchange ideas on when they personally might not need to be Slow and again, some responded in the sense of speed, and others in the sense of mindfulness. “Expedient needs” (#1) and when the “situation calls for spontaneity and passion” (#2) were two speed related thoughts. Consciously choosing a more mindful approach was deemed unnecessary in situations that have an inherently natural “flow” (#2) or “fluency” (#7 @ 51:13).

Ideas about emotion, passion and instinct featured heavily in discussion about when participants felt unable to adopt a Slow approach (53:45 onwards). This reiterated the conscious effort that participants felt was involved in adhering to Slow principles: “emotional scenarios” (#1), “emotional over-reaching” (#3) and “high emotion” (#7) were suggested as preventing Slowness. Yielding to emotion was considered in the discussion as a loss of control, either deliberate (#1) or from external “dictated events” (#5), and to have both positive and negative repercussions. Danger and emergency situations were also suggested in this section (#1; #2; #4; #7, and other instances of having to react on instincts (#1; #2). One participant cited choices that had been made in the past as

preventing the adoption of Slow approaches in certain aspects of both work and personal life (#6).

Through these discussions, it was possible to observe a refinement of what the group understood by 'being Slow'. There were effectively two discussions occurring: one which centred on notions of speed and time, and one which centred on awareness. At points, as suggestions were made of not needing to be Slow, other participants questioned the interpretation being used (46:02 onwards):

#7: "Erm, at the gym, I would never bother going slowly 'cos it's all about being [unclear], and exercising and being fit."

#1: "But you can just do it in one way, or you can do it quite mindfully in how you do it, so again, it's not about speed, um, how you work on the machines or whatever it is…Don't you think it's about how you do it, not what you do?"

And later (47:48 onwards):

#2: "Like if you're in a race, that's, yeah, I suppose it's the wording of what Slow means and that, doesn't it? If you're a race car driver, you're not physically going slow but how Slow mindset are you in, your concentration"

#7: "You're probably in flow" [agreement]

#2: "That's when you don't need to apply…"

#1: "It shouldn't be called Slow, it should be called Flow"

#2: "This is the problem, it's the wrong word 'cos takes the word time and speed and it's not about that really, it's about something else"

This passage, when taken in the context of comments made earlier by #2, illustrates the evolving nature of human perception which here developed over time and in discussion. When contributing a Slow approach in the opening phase, the original example given was (13:50):

#2: “Time management is my big key…as soon as I started to realise about slowing down was all about you only get 24 hours in a day so what can you do with it? And everybody does 24 hours in a day but some people manage to do more than others so I took a real look at time, yeah, it’s a huge thing for slowing down, ‘cos you want to get more done but you want to get less done. You want to do it quicker, but at the right…it’s about the right *time* to do something”

The later contribution regarding Slow terminology shifts from this initial understanding of Slow offering time management opportunities, to Slow being about something other than controlling time.

4.9.2 Life today

The second section was designed as a transition between the two focal areas: Slow perspectives in the first section, and information practices in the final section. This teased out what Slow addressed for the group, and was also intended to explore which areas of pressure and overload they felt it alleviated. It was possible that information and the related areas of speed, scale and overload would emerge here. However, the term ‘overload’ was not used in the introduction as it was deemed too loaded (negative) and too leading (assumption). These connotations had been discussed during the Delphi, with regards to the term ‘consumer’ (3.11.5, pp. 192-195). The term ‘pressure’ was used because the pilot results had suggested its emergence, and it had indeed been used during the initial discussions about Slow approaches.

Information was suggested immediately once the topic of pressure had been introduced. “Overload…too many emails” (#1 @ 1:21:24) was the first example given of areas in life in which pressure played a prominent role: “too much coming at me” (#1). This was taken up by discussion about “information overload” and “filter failure” (#2). Despite these early thoughts on the subject, information was not established as the key point of discussion. However, this was to be taken up in the concluding section and not deemed to be a missed opportunity at this stage.

The group were asked to consider the aspects of their lives in which they felt the most pressure. This was expected to echo the discussions about the situations in which they adopted a Slow approach. Many written recorded examples were work-related: “remaining employed” (#5), “to perform at a high level” (#2) and other peoples’ personal agendas (#1, #6). “Too much input” (#1) in a work environment was also cited as creating pressure. The need to keep up with colleagues, and the ability to do so through ‘presence information’, had also been mentioned in earlier conversation (#2 @ 26:02). Non-work pressures were also recorded: “social pressure to achieve more” (#2), “others’ expectations of me” (#1) and “dealing with what I perceive as people being self-absorbed and not thinking about the consequences of their actions” (#6). Other, perhaps broader, senses of pressure were also suggested, such as “financial anxieties” and “emotional tension” (#7), “family time” (#2) and a “lack of general organisational skill” (#3).

Most participants recorded examples of ‘bad’ pressure, as opposed to ‘good’ pressure: a distinction that the group explored through discussion about their emotional reactions (1:27:19 onwards). One participant recorded that whilst work did create the most pressure, “generally it’s pressure I enjoy” (#4), although this was the only instance of ‘good’ pressure being recorded. The discussion about the nature of pressure was engaging and illustrated the burgeoning sense of self-propulsion that the group was developing. An example of the group thinking the issues through together can be seen in this exchange about the nature of pressure:

#2: “It can be enjoyable as well”
Mod.: “Pressure?”
#2: “Mmn. It can be, pushed to your limits, it can help”
#1: “A challenge”
#2: “The challenge, that’s the right one, if it *is* a challenge, not a, not the wrong kind of pressure”
#4: “No, not an overload, not managing the overload”

This exchange, in response to a prompt about emotional reactions, laid the foundations for the distinction between ‘good’ and ‘bad’ pressure to be made. These different kinds of pressure caused understandably different emotional responses or repercussions. These are detailed below (contributions that were provided on the recording sheets are **emboldened**; contributions that arose during discussion are regular).

‘GOOD’	**‘BAD’**		
Excited	Resentful	Burnt out	**Angry**
Motivated	Fearful	Defiant	**Defensive**
Energetic	Disconnected	**Grumpy**	**Disengaged**
Focused	Sluggish	**Unappreciative**	**Depression**
Alive	Burdened	**Lose sight of being present & mindful**	**Paranoia**
Directed	Heavy	**Don’t think clearly**	**Sick with nerves**
Challenged	Hysterical	**Don’t reflect**	**Worried**
	Hypertense	**Frustrated**	
	Anxious	**Irritated**	

Table 3: ‘Good’ and ‘bad’ responses to pressure

The more expansive ‘bad’ list was a result of the moderator focusing discussion on that side of pressure and should not be taken to indicate a greater depth of feeling in that regard. This focus was necessary to tease out how Slow addresses these pressures in the form of negative overloads, as proposed in earlier chapters of the project (1.2.4, pp. 40-46), and the Delphi output regarding Slow potential (3.13, pp. 198-199).

The group also discussed the nature of pressure being externally or internally generated (1:25:26 onwards). This echoes the Delphi discussion regarding the nature of overload (3.11.4, pp. 192-192). Two participants recorded their own high expectations as causing pressure (#1, #3). This was taken up during discussion as being experienced as “unrealistic” (#2) or “inhuman” (#1) expectations in both work and non-work situations:

#1: “Is there also within that, as, er, the pressure that one puts on oneself? I mean, I put huge high expectations on what I can achieve, and then I feel disappointed in myself and, you, never mind anyone else: I am my own worst judge” (1:25:58)

This internally generated pressure also manifested itself in financial concerns that prevented one participant from pursuing an alternative lifestyle: the financial risk of giving up an established career represented too great a loss of control to contemplate, and that caused a personal pressure to remain in that career (#6 @ 1:23:13).

The group were asked to talk about what they did in response to these pressures, bearing in mind the emotions that they had described (1:32:29 onwards). Some of the reactions subsequently recorded mirror how the group described their Slow approaches: “stand back and see the bigger picture and what’s realistic” (#4), “reflect and review, and then prioritise” (#2), “adopt some strategies to manage – some successful, some not” (#1). And others echo the issues that Slow had been employed to alleviate: “loosing site [sic] of the present” (#6) and “sometimes social withdrawal” (#5). Still others suggest even more intense reactions to pressure: “give up, defensive, exhaustion” (#7), “take it out on other people” (#6) and “get angry, blame someone else” (#3). Several participants described escapist or ‘flight’ tactics which involved ignoring the pressure or actively diverting their attention away from it (#1, #5), as well as a tendency to eat and drink in knowingly unhealthy ways (#3,#4, #5, #7). Two participants also described reacting with determination to fight the pressure and conquer it, generally by working harder (#1, #4).

The last section of the recording sheet for ‘Life today’ established what, if any, proactive steps the group members took to specifically alleviate the pressures discussed, and also what they felt could alleviate the pressure but which was either impractical or unavailable. Many participants *did* employ what had previously been described as Slow strategies to alleviate pressure and overloads (as below), and this confirms that adopting these principles is a practical activity, and is evident in the everyday lives of these participants. The

group contributed a number of different methods they employed to alleviate pressures and which they felt might also provide alleviation.

The majority of participants recorded at least one example of steps taken to alleviate pressure and overload which can be termed ‘Slow’, given their earlier negotiated definition:

#1: “More artful choices, prioritising”
#1: “Self-awareness”
#2: “Dedicate focused time and effort”
#3: “Get creative”
#4: “If I remember, stand back and see what’s going on”
#4: “Yoga, meditation, reading, etc.”
#5: “Adopt a rational approach”
#6: “Take a walk, be more mindful”

This implies that Slow, as described and understood by each of the participants in this group, can be and is used as a means of alleviating a variety of everyday pressures. All steps were personal activities, rather than any changes in the working environment or in other peoples’ attitudes.

The responses to what else *might* alleviate these pressures were similarly individual and personal strategies, rather than institutional or cultural changes that might be made. Writing things down (#6), talking things through (#5), listening better (#1) and spending time with friends (#4, #5) were all cited as potentially useful in such scenarios. Exercise (#3) was also suggested as a personal strategy, as well as gaining perspective (#7) and focusing on long term gains rather than short term issues (#2). It is not clear from the recording sheets whether the examples given in the second section were aspirational as had been intended. It could be that these were further examples of choices that the participants had already made to alleviate the pressures that had been discussed, rather than choices that they would like to pursue if able.

4.9.3 Slow & information

It was anticipated that the group's attention would be well focused on pressures and overload, as well as strategies, Slow and otherwise, that they personally used to address those pressures. This focus segued into discussion about informational pressures, and whether they caused issues and were dealt with in the same ways as other pressures. It is evident from the recording sheets that this was the case, although it may have been more useful to focus on information from the outset of the session to probe more deeply than was possible during the remaining time. Several participants left gaps in this particular recording sheet which was a result of time constraints rather than confusion: the discussion that was had around these topics indicated that the group understood what was being asked of them, but time did not allow comprehensive or expansive written records from every participant.

In the opening section, the group built a perspective of what they understood by 'Slow', and it was here necessary to build a picture of what the group understood by 'information' and 'information use'. This avoided the assumption that there were issues to be addressed. This group, or individuals within the group, may not have perceived any such issues and may therefore not have considered the need for coping mechanisms. However, and given previous discussions and the nature of preceding sections, it was evident (to moderator and group) that information would be the next focus of enquiry.

The group were first asked to consider situations in their daily lives in which they used information. It was not possible to accommodate the scheduled thinking break at this stage, and the topic was received with hesitancy as some participants deciphered what was being asked of them. With an opportunity to reflect on the question, this may have been avoided. The group began their discussion by contributing sources of information (rather than situations or contexts) and it was evident that the discursive nature of proceedings of the group had been disrupted. Not only did they feel unable to respond to the question as it had been phrased, but they were no longer interacting with each other.

The only context, as such, that was offered was that of work meetings, although a variety of types of information was perceived as necessary in such circumstances. A reason for the apparent inability to respond was offered by one participant as, in effect, the ubiquity of information:

#7: “It’s kind of constant, but the, er, to be honest, when you first asked that question I was a little bit overwhelmed by the opportunity, er, that I had to reply, you know, ‘cos every meeting I’m in you need information…” (1:55:40)

And later:

#7: “It’s just that every situation I need information, whether it be someone’s expression so I know how to reply…” (1:56:49)

Gathering perceptions about the contexts was not successful but the group’s thoughts about sources show an understanding of the topic, albeit through rather more disjointed conversation than had previously been the case. This was designed as an introductory phase for the final section and these stand-alone contributions were adequate focusing material in place of deep discussion. A number of sources emerged after persistent probing and encouragement.

- Diary
- Email
- Newspapers
- People
- Body language
- Phone calls
- Radio
- Podcasts
- Blogs
- Nutritional information
- iPhone, iPad, computer
- Internet (especially news sites: e.g. BBC, Yahoo)
- Internet (especially search sites: e.g. Google)
- Internet (especially social media: e.g. Facebook, Twitter)

Every participant offered additional thoughts when contributing to this part of the discussion, either to do with their information practices or their feelings about particular sources. This was to be expanded upon during a subsequent section specifically intended to explore informational pressure, but conversation was allowed to flow around these related ideas. For example, one participant mentioned the pursuit of information on Wikipedia and this encouraged discussion about searching "randomly, leisurely" (#5 @ 1:52:21). The group assumed that networked information sources were the root cause of informational pressure, for example, addictions to Google (#3 @ 1:53:02) and BBC Online (#4 @ 1:58:24) were mentioned. This compulsion was taken up later in some depth.

The group were asked to consider more specifically which sources (or contexts) caused them pressure, either in the same terms as had already been discussed ('good' or 'bad' pressure) or in specific ways to do with those sources (or contexts). Email was cited by several group members as causing the most pressure (#1, #5, #7) and several characteristics were identified as contributing to that pressure: the volume (#1, #7), the "urgency to respond" (#1, #5), and the idea that the information was not sought (#1). These characteristics can be loosely termed as relating to scale, speed and control. "Meaningless attachments" (#1) and "large wordy blocks" (#3) were also cited as adding to the pressure.

An important outcome of this section was the perception of some participants that generating information caused as much pressure as the expectation to absorb and use it. This was discussed within the group as a result of a culture where "information's become much more a two-way process" (#7 @ 2:05:57) and where "we're meant to be generating as well as receiving…and generating, I mean, you feel like, you sort of feel if you're not doing it then, like, 'Am I functioning properly?'" (#4 @ 2:07:23). The record sheets reiterate this perception: "when I feel I have to generate it" (#7), "having to produce it" (#2), "the pressure to publish and be an information source" (#4). This pressure was largely to do with social expectations, and the impetus to keep up with peers, and was centred on the internet and social media.

The group discussed, and some participants recorded, this publishing pressure, and some also recorded the benefits of easily and freely accessible information via the internet. Most agreed that there was a double edged sword to networked information: being able to pursue things on Wikipedia (#5 @ 1:52:21) but possibly only ever going to snippet level rather than delving deeper (#2 @ 1:59:05); information via the internet is easily accessed but is constantly being pushed at people (#6 @ 2:04:17); social media is egotistical but enables communication (#3 @ 2:08:25). A recorded point that the internet is "equally good and bad" (#3) in terms of how much pressure it exerts on people, reflects the discussion in this section. Extremes of this group's opinion ranged from being "a little in love with the internet" (#7 @ 2:03:27) because of its speed to "feeling compelled to seek [information] out [and] because of this, I'm always on and don't unplug" (#6).

The group were ultimately asked to record the steps that they take to alleviate any information-specific pressures that had been considered and discussed. Some steps were discussed regarding possible information addictions:

#6: "On the one hand, I'm like, yeah, I agree, it's eased, but then on the other hand, it's just this constant push, push, push at me, and like the minute my eyes are like this [opening], I'm in bed, I roll over and I'm like [gestures scrolling], I'm on my iPhone, I mean that's *bad*!" (2:04:17)

And later, in response to further comments specifically about Facebook:

#2: "Have you lived without it for a month? Have you ever tried not looking at Facebook for a month? Or not looking at your…no?" (2:12:42)

#6: "Yeah, yes, I have…but I consider all this stuff, is almost an addiction though, like I consider, like my iPad and my iPhone and all the information that's being, out there, I, I feel like I do have an addiction to it, which probably sounds bad, but like, who's compelled to wake up at 6.30 in the morning and go [gestures scrolling]? Seriously!"

Purposefully switching technology off was indeed recorded as a step taken to alleviate informational pressure (#6), and as an ideal step (#5). It was also

framed as a defiant avoidance of certain contexts and sources which cause pressure (#1, #4). Other more general organisational practices were listed, such as “rigorous filtering and filing” (#7), creating lists of “information sources that I trust” (#2) and the decision to “take a step back, attempt to make a priority list” (#5). One participant recorded what could be called a specifically Slow approach to information, given what had been discussed and defined by the group:

#6: “Learn to balance better and realise there is a place and time. Instant gratification isn’t all that it’s worth.”

4.10 Summary

The focus group brought together a selection of people interested in Slow ideas. They were asked to consider three related areas and discuss them with each other. These areas were: Slow meaning & practice, Life today, and Slow & information. The purpose of this discussion was to identify if and where Slow practices intersect with information use.

The Slow focus group achieved the general aims laid out for this section of the project. The aims related to the following research question:

- What, if any, are the implications of a Slow perspective on everyday information practices?

The aims were:

- To build an understanding of a Slow perspective in everyday life, and therefore build an understanding of the variety of pressures in everyday life
- To build an understanding of how a Slow perspective may intersect with specifically informational pressures

These were met by the following objectives, encapsulated by the Focus Group methodology in a number of ways:

- Gather opinion and experience through discussion
- Generate dynamic research environment
- Encourage reflection and critical thinking

The group discussed their individual and collective understanding of what being ‘Slow’ meant. This gave rise to two definitions: being Slow is not being fast, and being Slow is being aware. Both definitions assume that there is opportunity to choose the most appropriate course of action, and this relates to the notion of mindfulness. There are times when being Slow in either sense is unnecessary

or unhelpful, and the opportunity to actively choose *not* to be Slow was also important to the group.

Being Slow was most often a reaction to an overwhelming situation, and an antidote to some form of pressure in everyday life rather than a fundamental *a priori* lifestyle choice. Pressure itself does not always cause a negative reaction and could energise, motivate and concentrate. Nevertheless, choosing to be Slow in the face of everyday pressures could alleviate negativity where it did emerge, by increasing the feeling of individual control.

The group perceived information as a cause of everyday pressure through its ubiquity. However, this pressure was largely tolerated, or at least accepted, as a necessary evil of the current information landscape. The convenience of information technologies is, they discussed, too addictive to set aside. However, certain informational pressures could be avoided, notably the production of information in online and social environments. They were nevertheless able to conceive of a Slow attitude to information, which comprised of both physical and metaphorical ‘unplugging’ behaviours. There were indications that delving deeper than snippet-level, and becoming immersed in one information source might also constitute a Slow attitude to information, according to this group.

4.11 Chapter Four references

Barley, E.A., Murray, J. & Churchill, R. (2009) 'Using research evidence in mental health: user-rating and focus group study of clinicians' preferences for a new clinical question-answering service', *Health Information & Libraries Journal,* 26 (4), pp. 298-306.

Bloor, M., Frankland, J., Thomas, M. & Robson, K. (2001) *Focus groups in social Research*. London: Sage.

Burhanna, K.J., Seeholzer, J. & Salem, J.A. (2009) 'No natives here: a focus group study of student perceptions of Web 2.0 and the academic library', *Journal of Academic Librarianship,* 35 (6), pp. 523-532.

Carlock, D.M. & Maughan Perry, A. (2008) 'Exploring faculty experiences with e-books: a focus group', *Library Hi Tech,* 26 (2), pp. 244-254.

Charmaz, K. (2006) *Constructing grounded theory: a practical guide through qualitative data analysis*. London: Sage.

Connaway, L.S. (2006) 'Mountains, valleys, and pathways: serials users' needs and steps to meet them Part I: identifying serials users' needs: preliminary analysis of focus group and semi-structured interviews at colleges and universities', *Serials Librarian,* 52 (1-2), pp. 223-236.

Greenbaum, T.L. (2000) *Moderating focus groups: a practical guide for group facilitation*. London: Sage.

Krueger, R.A. (1994) *Focus groups: a practical guide for applied research,* 2nd edn. London: Sage.

MacMillan, D., McKee, S. & Sadler, S. (2007) 'Getting everyone on the same page: a staff focus group study for library web site redesign', *Reference Services Review,* 35 (3), pp. 425-433.

Morgan, D.L. (1986) *Focus groups as qualitative research*. London: Sage.

Naylor, S., Stoffel, B. & Van Der Laan, S. (2008) 'Why isn't our chat service used more? Finding of focus group discussions with undergraduate students', *Reference & User Services Quarterly,* 47 (4), pp. 342-354.

Olle, C. & Borrego, A. (2010) 'Librarians' perceptions on the use of electronic resources at Catalan academic libraries: results of a focus group', *New Library World,* 111 (1/2), pp. 46-54.

Quinn Patton, M. (2002) *Qualitative research & evaluation methods*. 3rd edn. London: Sage.

Seeholzer, J. & Salem, J.A. (2011) 'Library on the go: a focus group study of the mobile web and the academic library', *College & Research Libraries,* 72 (1), pp. 9-20.

Slow Down London (2012) *About*. Available: http://www.slowdownlondon.co.uk/about/ (Accessed: 22 June 2012).

Walden, G.R. (2006) 'Focus group interviewing in the library literature: a selective annotated bibliography 1996-2005', *Reference Services Review,* 34, (2), pp. 222-241.

Weber, M.A. & Flatley, R.K. (2006) 'What do faculty want? A focus group study of faculty at a mid-sized public university', *Library Philosophy & Practice* [online], 9 (1). Available: http://www.webpages.uidaho.edu/~mbolin/weber-flatley.htm (Accessed: 22 June 2012).

Weber, M.A. & Flatley, R.K. (2008) 'What do students want? A focus group study of students at a mid-sized public university', *Library Philosophy & Practice* [online], March. Available: http://www.webpages.uidaho.edu/~mbolin/weber-flatley2.htm (Accessed: 22 June 2012).

5. Chapter Five
Conclusions and implications

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5.1 Research questions & methods revisited

This thesis rests on three entwined research questions which have been explored in the course of the project. The aim was to better understand how people use information, and how people study information, through exploration of the implications of a Slow perspective. The project was exploratory in nature, and areas for further research have been opened up during the process. It is possible to highlight these areas which require additional exploration, as well as draw conclusions from the two related studies.

It was hypothesised in the opening pages of this thesis that a Slow perspective has the potential to alleviate information overload and increase information literacy by reframing information management strategies (1.1, p. 13). To assess this potential, the following questions were devised:

1. What is a Slow perspective?
2. What, if any, are the implications of a Slow perspective for the study and theory of information behaviour?
3. What, if any, are the implications of a Slow perspective on everyday information practices?

The aim of these three contributory questions was to initiate an exploration into the implications of a Slow perspective of human information behaviour. The methodological approach was purposefully and mindfully adopted so as to invoke Slow principles within the research process. This approach was rooted in social constructivism which manifested itself in the tools and analysis utilised throughout the piece (1.1.2, p. 14-16).

Adopting a social constructive approach to the research dictated that exploration of phenomena was through qualitative data, generated from participant interaction and a high degree of researcher involvement. This parallels the Slow principle of connection, which is encapsulated in the constructivist argument that “we are part of the world we study and the data we collect” (Charmaz, 2006, p. 10). A greater qualitative richness is possible

through emphasis of the researcher's role, rather than disconnecting from the objects and methods of study.

The format of each study furthered this sense of interaction, and supported the social construction of meaning enshrined in the methodology. Both studies sought to engage groups of people in discussion, rather than observing a string of individuals, first in a modified Delphi of information behaviour experts and secondly in a focus group of Slow experts. In both cases, the principle of connection was paramount, hence the iteration of the Delphi (3.1, p. 119) and the peer-led discussion of the focus group (4.1, p. 207). These elements allowed the groups to interact, and the active role of 'moderator' meant that the researcher was also part of this interaction in both studies.

The principle of reflection was also key, and design steps were taken to ensure that time was set aside in each study for participants to actively consider their responses, possibly amend them in light of others' and formulate them in writing (response windows in the Delphi and thinking or writing breaks in the focus group). These breaks were intended to maintain a sustainable tempo within each study, to encourage critical thinking and to ensure that each individual was afforded the opportunity to contribute equally.

The theme of critical reflection was extended to the analysis of each study, through the use of constant comparison and memo writing as analytical tools. Although data was generated through group processes, *how* meanings were mediated within those groups was not a focus of enquiry, nor was the derivation of one clear consensus. Rather, participants were afforded the opportunity to develop their thinking through discussion and comparison, and their contributions considered on an individual basis having been generated within these group processes. Contributions were then synthesised to present *in vivo* commentaries of the issues at hand.

Underlying both studies was an initial appraisal of information in contemporary society, as shown in both the literature review of Chapter One and the conceptual work of Chapter Two. Popular writings were included alongside academic literature in Chapter One in order to illustrate the prevalence and

influence of information beyond the academic domain, particularly in the framing of ‘overload’ (1.2.4, pp. 40-46). Strands from this review were taken up as the basis of the conceptual work, which sought to imagine information as central to social life, the behaviours which might reasonably be assumed to exist therein, and the role of the human actor. This involved reviewing Frank Webster’s definitions of the Information Society (2.2.2, pp. 85-93) and synthesising Raymond Williams’ writings on culture, society and communication (2.2.3, pp. 93-96 & 2.3.4, pp. 102-103).

Slow principles were introduced as a means of understanding coping behaviours in contemporary society as positive, purposive and in reaction to an overarching consumerist drive. They were introduced as providing “a positive social philosophy…to displace speed from its central position in the cultural imagination” (Tomlinson, 2007, p. 1). The relevance of Slow to information use was illustrated through the foregrounding of information’s position within society. Over the course of the conceptual work, and the ensuing studies, consumerism became something of an assumed presence. Its relevance to information seeking and use was contested during the Delphi (3.11.5, pp. 192-195) and its role in information technology discussed during the focus group (4.9.1, p. 237-238).

The assumed existence of information overload was used as a starting point for the thesis, and for both studies. Its nature was discussed throughout the project and findings suggested that it is difficult to conceptualise in any fixed way: it can be both socially and personally generated, and is both inevitable and avoidable (3.11.4, pp. 188-192 & 4.9.3, pp. 250-251). As such, it is difficult to propose generalised Slow solutions from these studies. Rather, focused conclusions will be drawn out from each study in relation to what is now known that was not known before they took place.

5.2 New knowledge

This concluding section moves on to outline the elements of new knowledge generated by the studies in accordance with the guiding research questions. Much of this has been discussed in preceding chapters, but is here summarised. Reference points within previous chapters are provided in brackets where appropriate. The resultant knowledge will ultimately be looked at from a critical “so what?” angle, to ascertain the implications that they have for the research agenda. This will revisit where the project sits in the research landscape and outline where it leads next.

In order to assess what we now know, the research questions will be teased out in reverse order. That is, first, points about Slow and everyday information practices will be laid out (RQ3), then the implications for study and theory (RQ2). Lastly a Slow perspective (RQ1) relevant to both preceding questions will be established by way of an illustrative diagram and explanation (Figure 3, p. 275). This diagram challenges existing assumptions relating to ‘information’ and causality, and describes the interface between Slow principles and information behaviour.

5.2.1 RQ3: What, if any, are the implications of a Slow perspective on everyday information practices?

To explore the implications of a Slow perspective on everyday information practices, the focus group study brought together Slow experts to discuss and reflect on how pressure and overload affected their capacity and desire to invoke Slow ideals. These findings explain the notion of ‘informational balance’, purposive withdrawal and the rejection of Slow principles during information practices.

5.2.1.1 Slow principles provide a framework for ‘informational balance’

The focus group participants discussed what being Slow meant to them as individuals, and worked towards a mutual understanding of the principles involved. Two prongs of argument developed: for this group, being Slow was not being fast and being Slow was being aware (4.10, pp. 252-253). In either definition, all participants held that making balanced choices appropriate to any given situation was the root of a Slow approach (4.9.1, p. 239). Creating the space and time to make these choices when faced with informational pressure, and most specifically the pressure to produce information, emerged as a potential benefit of adopting a Slow attitude in life today. This benefit could not always be attained, as discussed below, but it was perceived to exist nevertheless.

In an environment characterised by networked information, the volume and unrelenting push of unsolicited material was perceived as pressurising people to respond and to accelerate their responses with ever more urgency (4.9.3, p. 250). For some, this pressure caused feelings of compulsion and inadequacy, and a tendency to skim at snippet-level where more depth and reflection was desired (4.9.3, pp. 250-251). The relentless push of information, enabled by the speed and ease of its communication, is accompanied by a comparable speed and ease of access which was acknowledged as beneficial in certain situations, and absolutely vital in others (4.9.3, p. 251).

To alleviate feelings of inadequacy and compulsion in other areas of life, participants took Slow steps to create space and time away from that which was perceived to be causing pressure. These steps allowed room for reflection, appreciation of the issues and the course of action which might best resolve the situation (4.9.1, p. 239). These steps might also lead to ‘informational balance’. This was specifically cited as a potential benefit of a Slow attitude to information (4.9.3, p. 252) and parallels the Delphi discussion about what constitutes information literacy with regards to consideration and reflection (3.11.2, p. 181). Awareness, reflection and the ability to make appropriate choices are central elements of information literacy, and the focus group study shows that Slow principles are enacted in order to encourage and accommodate these elements.

Informational balance is assumed in Figure 3 (p. 275) as the state in which information literacy can be attained, through the conscious application of certain behaviours and management strategies.

5.2.1.2 Slow principles are reflected in some withdrawal and/or avoidance behaviours

As stated above, the pressure to produce information can elicit feelings previously reported in reaction to information overload (1.2.3, pp. 35-40). This became especially resonant when discussion in the focus group turned to social networks. In these cases, adopting a Slow approach to create space and time to respond mindfully was reported as impractical and impossible. To avoid this pressure, participants instead reported a purposive withdrawal from the activity, but not necessarily from the network (4.9.3, p. 250). For example, maintaining a Twitter account without publishing updates. This perceived pressure to produce information and to become an information source has not received substantial attention in the literature, and will provide material for research recommendations later in this chapter.

The notion of completely ‘unplugging’ was an expected reaction to informational pressure, and the focus group discussed the practicalities of doing so (4.9.3, p. 251). Total deceleration is not a central premise of a Slow approach, which hinges instead on the capacity and opportunity to adopt appropriate behaviour. Automatically ‘unplugging’ would not therefore represent a Slow attitude by itself, unless it had been deemed the most appropriate course of action in any given situation, and this was the case in some examples presented by participants (4.9.3, p. 251). This can be termed Slow information behaviour, and is an example of purposive withdrawal.

Other forms of interaction with information were presented as purposive withdrawal and/or avoidance behaviours which resonate with Slow principles. Spending time to read a book was suggested as a means of escape (4.9.1, p. 237). This form of information behaviour was engaged in not only to avoid the pressure of other information channels, but also to improve relationships (when

reading to children) and to pass the time more simply. Actively slowing down to read more deeply was also reported as a means of combatting the overwhelming effects of speed and volume (4.9.1, p. 237). These examples emphasise the Slow principle of connection, and the focus group's definition of Slow as being aware, in addition to being not fast.

Another example of information behaviour presented as a means of 'escape' was surfing the internet without particular pre-defined direction. This was reported as a way of avoiding pressure, which also sparked serendipitous interest in otherwise unexplored places (4.9.3, p. 250). This searching was undertaken "randomly, leisurely" which implies a contrasting directed and pressurised search in other contexts, although it is possible that most contexts present a combination of these characteristics. Nevertheless, the focus group presented this form of information behaviour as a means of purposive withdrawal from other overloading channels, and avoidance of the constant push they perceived from them.

These examples illustrate that people actively, though occasionally, choose to pursue particular information activities to avoid speed and scale, in times of information overload and more generally in life. These activities are perceived as providing breathing space outside of the dominant tempo, and away from other pressures, and could be described as Slow although the participants did not do so themselves. People select appropriate information behaviours which reflect a variety of tempos, as appropriate to a particular situation. This occurs either when a need for focus is recognised, as in the act of electing to read offline, or when a need for escape is recognised, as in the undirected pursuit of information online. These needs exist rather than a need for information, and engaging in some *other* form of information behaviour provides an alternative to that which is causing overload or pressure.

The behaviours are included in Figure 3 (p. 275) as part of a 'Slow buffer zone' (D) which exists between the information actor's central behaviours and the prevalent information culture. This zone provides space for critical reflection in order to maintain informational balance.

5.2.1.3 Slow principles are likely to be rejected during some information practices

Being Slow in information terms rests on an awareness of contextual demands, and taking action to create the space and time for making appropriate information choices. The focus group suggested that invoking what can be described as a Slow approach would assist their capacity to absorb information and use it more effectively, for example by learning to balance, taking a step back or purposive avoidance (4.9.3, pp. 251-252).

However, participants suggested in earlier discussion that they sometimes felt unwilling or indeed unable to adopt such an approach. Being aware of a situation's demands and pressures did not necessarily generate a Slow perspective, which was sometimes rationally rejected as unnecessary, and sometimes not even considered. Moreover, being aware of a situation's pressures did not automatically mean that a Slow approach was feasible even if it was desired. These two principles of rejection (being unwilling or being unable) relate to the seeking element of information behaviour.

An unwillingness to adopt Slow principles was reported to exist during activities that displayed inherent Slowness where no additional conscious effort was required (4.9.1, p. 241). This might be extended to the Slow information behaviours cited above, such as reading offline and undirected internet surfing. Furthermore, participants were unwilling to engage in mindful appraisal of a situation when what they wanted to experience was contrary to Slow thinking: for example; superficiality; disengagement or consumerist possession (4.9.1, p. 240). This too might be extended to the above information behaviours, where snippets of trivial information are desired, for example. In this latter case, emotional reactions and the desire to act on instinct rather than apply methodical consciousness are influential. These are internally generated, rational decisions made against the adoption of Slow principles in a particular situation.

The power of emotional reactions was also felt to play a part in situations where participants felt unable to adopt a Slow attitude (4.9.1, p. 240). In emergency

situations, the group suggested that not only were Slow principles unnecessary (i.e. they were unwilling to adopt them), it would also be impossible to uphold them in the face of such high performance pressure. The need to rely on instinctive decision-making would take over any desire for reflection, and this too can be extended to expedient information needs and associated behaviours. This could also resonate in task-based information processes where an end-point is targeted and efficiency is key (1.2.1.5, pp. 25-31).

Reasons for feeling unable to adopt a Slow attitude specifically in relation to information were reported by the group. These included the compulsion to seek information that was not needed for any immediate or obvious use (4.9.3, p. 251). The existence of a seemingly infinite quantity of information was deemed a hindrance to Slow principles. The capacity to balance what can be accessed with what is actually required is challenged by the ease of availability and, relatedly, the speed with which it can be communicated. Slow ideals are therefore rejected in situations where they might be of most use, namely overloaded or accelerated information environments.

It was also suggested that some people feel unable to adopt Slow principles when external influences sweep them forwards, such as work-related pressure to perform and social pressure to keep up (4.9.2, pp. 243-244). Although Slow is a personal lifestyle choice, this reflects that broader external pressures naturally impact on an individual's ability to pursue certain behaviours. This was echoed during the Delphi discussion concerning the informational and societal roots of 'overload' (3.11.4, pp. 188-192). In many ways, the focus group's discussion about being unable and also being unwilling to adopt Slow approaches was predicted during the Delphi consideration of the benefits and disadvantages of informational speed and scale (3.11.3, pp. 185-188).

These principles of rejection illustrate that there are situations in which people do not implement the behaviours they believe would assist their navigation of the information landscape. This is because they do not want to implement them or because they cannot. Slow information behaviour exists within everyday information practices, as shown in the preceding sections, but it is not unilaterally applied or unilaterally applicable. It can be seen that behaviours are

selected which reflect a variety of levels of critical awareness, and that Slow principles are rejected when superficiality, for example, is required or desired.

Figure 3 (p. 275) implies the rejection of Slow principles leads to the acceptance of more incoming information, or the active pull of more information inside the buffer zone (B). These increased quantities of information can disrupt informational balance and lead to information illiteracy.

5.2.2 RQ2: What, if any, are the implications of a Slow perspective for the study and theory of information behaviour?

Having looked at the interface between Slow and information practices, it is possible to suggest the implications that a Slow perspective has for the theory and study of information behaviour. These suggestions combine the findings discussed above with existing models of information behaviour, and outline the likely impact on the research agenda if Slow concerns were to be foregrounded. This includes highlighting the assumptions that would be challenged, and the relatively ignored aspects of information interactions that would be centralised. Slow principles are then aligned with a new view of information literacy, using findings from both the Delphi and focus group processes.

5.2.2.1 A Slow perspective highlights the experiential nature of 'information' in non-task-based information behaviour

As shown in the previous section, a Slow approach is used when the pressure of information communication overwhelms or overloads an individual. In the face of a constant push of information, steps are sometimes taken to attain balance or to withdraw (4.9.3, pp. 247-251, 5.2.1.1, pp. 261-263 & 5.2.1.2, pp. 263-265). This pressure or overload is a lived experience of 'information'. This experiential quality, that information is felt to cause a reaction, is foregrounded in a Slow view because of the behaviours described above. This is in contrast to the instrumental view of information offered by several existing models of information behaviour.

The focus of many existing models, as discussed in Chapter One (1.2.1.5, pp. 25-32) is task- or goal-based information seeking. This focus was discussed in the Delphi study as the participants considered the nature of information, and the negative aspects of using the term 'consumer' (3.11.1, pp. 177-179 & 3.11.5, p. 194). Task-based behaviours, which largely involve directed search activities, were described as one example of information interactions, and the prevalence of these behaviours in HIB models implies a widespread disciplinary interest in snap-shots of information seeking and use (3.9.3.1, p. 165). Models

based on information behaviour of this kind describe isolated tasks where information is sought to fulfil a need. For example, in Wilson, Ellis and Kuhlthau, a need of some kind is recognised which prompts information seeking behaviour (1. 2.1.5, pp. 25-32).

This task-based view of information behaviour implies an underlying instrumental view of information: an information need initiates a search for information which will satisfy that need. Information is implicitly inserted into the process when it has been located. For example, in Wilson's 1981 model, demands are made of information systems and other sources to obtain information when a need has arisen (Wilson, 1999). In reality, and as discussed during the Delphi, information is sought, discovered or delivered in a variety of ways which do not correlate with this instrumental view (3.11.1, p. 177 & 3.11.5, p. 192). Framing information as a sought object, as in the early Wilson model, does not reflect its capacity to influence and overwhelm, that is to have an experiential effect, nor does it reflect the variety of roles that the information actor can assume.

The difference between these views can be considered as, in the case of instrumentality, information existing as a series of blocks or objects, waiting to be sought and used. In the experiential view, information surrounds the information actor as a backdrop to daily life. It is pushed towards them, as well as being pulled in (or sought) by the actor for task-based and other information interactions. This echoes the notion of the dynamic information culture presented in Chapter Two (2.2 & 2.3, pp. 85-103), which itself rests on a combination of Frank Webster's definitions of the Information Society and Raymond Williams' work on culture.

The instrumental view of information which exists in some models cannot adequately reflect the nature of information as it is perceived by individuals engaged in managing it on an everyday basis. Indeed, the task-based models already described were not often devised to describe everyday experience, but to capture a finite process with a beginning and an end. A Slow perspective of information behaviour highlights the instrumental assumption of these existing models by positing 'information' as the cultural backdrop. It is not solely a tool

which is sought in isolated displays of seeking and use, although that is sometimes the context in which it is needed.

Slow information behaviour is initiated not by an information need, but by the pressures of the information that surrounds the actor, and it does not conclude with ‘use’, but assumes that use is ongoing and potentially without end. These assumptions allow for the variety of behaviours discussed during the Delphi (3.11.5, p. 192) and for the examples of Slow information behaviour described by the focus group (4.9.3, pp. 247-251).

Figure 3 (p. 275) will be presented in response to the first research question. It illustrates this cultural and experiential conception of information as a grey backdrop (A) to the findings already described in earlier sections of this chapter (namely 5.2, pp. 261-267)

5.2.2.2 A Slow perspective highlights the temporal fluidity of some information behaviour

The Slow information behaviours reported by the focus group are not triggered by an information need, and therefore do not fit into the instrumental view of the process suggested by existing search-based models. As such, these behaviours have no informational trigger, but one which rests on the selection of appropriate action according to the level of focus or the tempo required (5.2.1.2, p. 263). This has implications not only for how ‘information’ is conceived, as above, but also how the process of interacting with information is deemed to develop. These implications can be understood by highlighting the temporal elements of information behaviour, that is *when* information behaviour occurs and *how long* each stage takes.

Existing models tend to progress through a series of stages or phases to describe the sequential development of an information search (1.2.1.5 & 1.2.1.6, pp. 25-32). Members of the Delphi panel felt that this misrepresented sometimes random aspects of other types of information behaviour (3.9.3.1, p. 164). The feedback loops of some models, as in Kuhlthau, and the non-

sequential nature of others, as in Ellis, were also discussed during early Delphi rounds (1.2.1.5, pp. 25-32 for examples, & 3.9.3.1, pp. 164-166). This suggests that the sequencing of the stage models does not adequately reflect more general modes of information behaviour, including those described by the focus group, and implies a temporal fixity that does not necessarily exist beyond the isolated snap-shot moments described in these models. ‘Temporal fixity’ here refers to the notion of an information actor initiating a search, progressing through stages, and reaching a fixed concluding end-point.

For example, in his 1999 paper on ‘Models in information behaviour research’, T.D. Wilson structures Ellis’ ‘features’ as a stage model with a beginning and an end (Wilson, 1999). Ellis originally devised the model to have no such structure in order to reflect that different features may be invoked at different points. Nevertheless, Wilson proposes a diagrammatic representation of the model which implies chronological progression from one point to the next through a refinement of behaviours, from search to filter to evaluation. This chronology is:

	Chaining				
Starting	Browsing	Differentiating	Extracting	Verifying	Ending
	Monitoring				

As before, the seeking and use processes here are initiated, executed and ended. This and other sequenced views do not accommodate Slow information behaviours if they are understood as an ongoing reaction to the information landscape. Instead, any one of these stages may be invoked as a reaction to engaging with information, and can therefore in themselves be the start-point of Slow information behaviour. Slow principles may be exhibited in all or any of these actions: undirected surfing may be ‘browsing’ but it is initiated by a need for escape; reading a book offline may be ‘extracting’ but it is initiated by a need for focus. Shifting from one behaviour to another depends on the pressure of the context, and can occur rapidly or slowly. Figure 3 (p. 275) illustrates this by the random placing of stages taken from the example models discussed in Chapter One (1.2.1.5, pp. 25-32), with the exception of start- or end-points (E).

Another temporal implication of the stage process models suggested during the early rounds of the Delphi is that each stage of behaviour appears to last an equal amount of time, and that the tempo of the behaviour described is therefore constant (3:28u). This may be a shortcoming of diagrammatic representation, but it emerged through the Delphi discussion that the tempo of information behaviour, of the varying rates of different stages, was understudied and was something which a Slow perspective could highlight (3.13, pp. 198-199). The focus group participants presented examples of information behaviour selected precisely for their different tempos, and the space that this deceleration afforded them (5.2.1.1, pp. 261-263).

This too is illustrated in Figure 3, through the use of arrows of varying length and varying direction, between core information behaviours (E). This indicates that there is no causal process fixed in time; each phase of behaviour may occur at a different rate and therefore take a different amount of time to complete.

5.2.2.3 A Slow perspective disrupts received notions of 'information literacy'

As discussed in Chapter One, many definitions of and tutorials for information literacy replicate the stage processes inherent in standard models of information behaviour (1.2.2, pp. 32-34). These views of information literacy are appropriate to task-based, usually formal, information seeking scenarios also described by the behaviour models. For example, students researching assignments in a library context are the key audience for information literacy education. As such the provision of such programmes is often the preserve of librarians in relation to the use of library resources, whether on- or offline (O'Connor, 2009).

The Delphi study explored the participants' understanding of what 'information literacy' entailed, and the perceptions offered once more replicated the steps and stages evident in accepted definitions of the term, and evident in existing behaviour models. Essentially, these steps were identifying a need, finding information, then evaluating and using it (3.11.2, p.181). Moreover, the contributions to this section of the discussion assumed that 'information literacy'

applied in a search context, with only limited acknowledgment of its potential relevance to everyday life or workplace settings (3.11.2, p. 184). There was an understanding within the Delphi panel that received notions of information literacy were too narrow to apply to all information interactions (3.11.2, p. 184).

Forms of Slow information behaviour have been reported as a way of dealing with problematic informational speed and scale (5.2.1.1 & 5.2.1.2, pp. 261-264). Excessive speed and scale (or overload) hinders information literacy, in that these elements interfere with an individual's capacity to find, evaluate and use information effectively. This is an understood interpretation of overload (1.2.3, pp. 35-40). Informational balance, as described above, can be seen as a means of alleviating overload and maintaining information literacy.

With this in mind, definitions of information literacy which rest on the execution of causally linked stages are limited in two ways. Firstly, such definitions imply an instrumental view of information which does not fully describe everyday information practices or the ways in which incoming information is managed. By extension, effective information use (or literacy) depends on progressing through steps to an end-point and, as outlined above, this does not adequately reflect the times at which Slow, and other coping behaviours, may be invoked to maintain effective control of the information landscape (5.2.2.2, pp. 270-272). Purposive withdrawal, for example, could not fit within this kind of perspective, despite it being used as a means of maintaining information literacy, or balance.

Secondly, there is a temporal implication within such definitions and models that suggests that the quicker an individual progresses through these steps, the more effective their information seeking has been, and the more literate they are. In the task-oriented situations described by both behaviour and literacy models, this is probably accurate, given that deadlines and associated notions of time poverty apply. This was acknowledged during the Delphi with discussion turning to when speed and scale, in combination or independently, might assist with the information seeking process (3.11.3, p. 186). It was also discussed during the focus group when expedient needs dictated that speed was especially desirable (4.9.1, p. 240).

Nevertheless, this rapidity of search and use neglects the management strategies and coping behaviours that may be used, and may be useful, during information practices on an everyday basis. Critical thinking, a fundamental aspect of information literacy according to the Delphi panel, is only possible when attention is paid to the time it takes to implement strategies and consider their appropriateness (3.11.2, p. 182). This relates to the awareness and selection of tempo according to need, as described above.

The stages of information behaviour models were broken out of their fixed snap-shot processes to illustrate the temporal fluidity of some situations in section 2.2.2 above. Similarly, the fixed phases of information literacy can be broken out of the linear chain which applies only in fixed circumstances. Instead, the tools and attitudes required to maintain literacy are conceived of as a ring around those information behaviours extracted from the example models. Building the contents of this ring can be seen to constitute the “personal information style” included in Christine Bruce’s characteristics of the information literate person (Bruce, 1997).

This ring provides a temporal ‘buffer zone’ between the information culture and the information communicator which represents the ongoing relevance of ‘information literacy’ to everyday life beyond the formal search process. Coping behaviours, such as filtering and purposive withdrawal, exist within this zone, and are engaged according to need or personal style. Information is pulled through the zone to the central core of ‘standard’ information behaviours, but it can also be pushed. When the influx of information overwhelms the buffer zone, through external or internal pressure, information overload occurs and information literacy is hindered.

This conception is also illustrated in Diagram 3 below. A ring (D) is positioned around the core information behaviours (E) to serve as a personal means of managing the flow of information communication (B and C) within the information culture (A).

5.2.3 RQ1: A Slow perspective

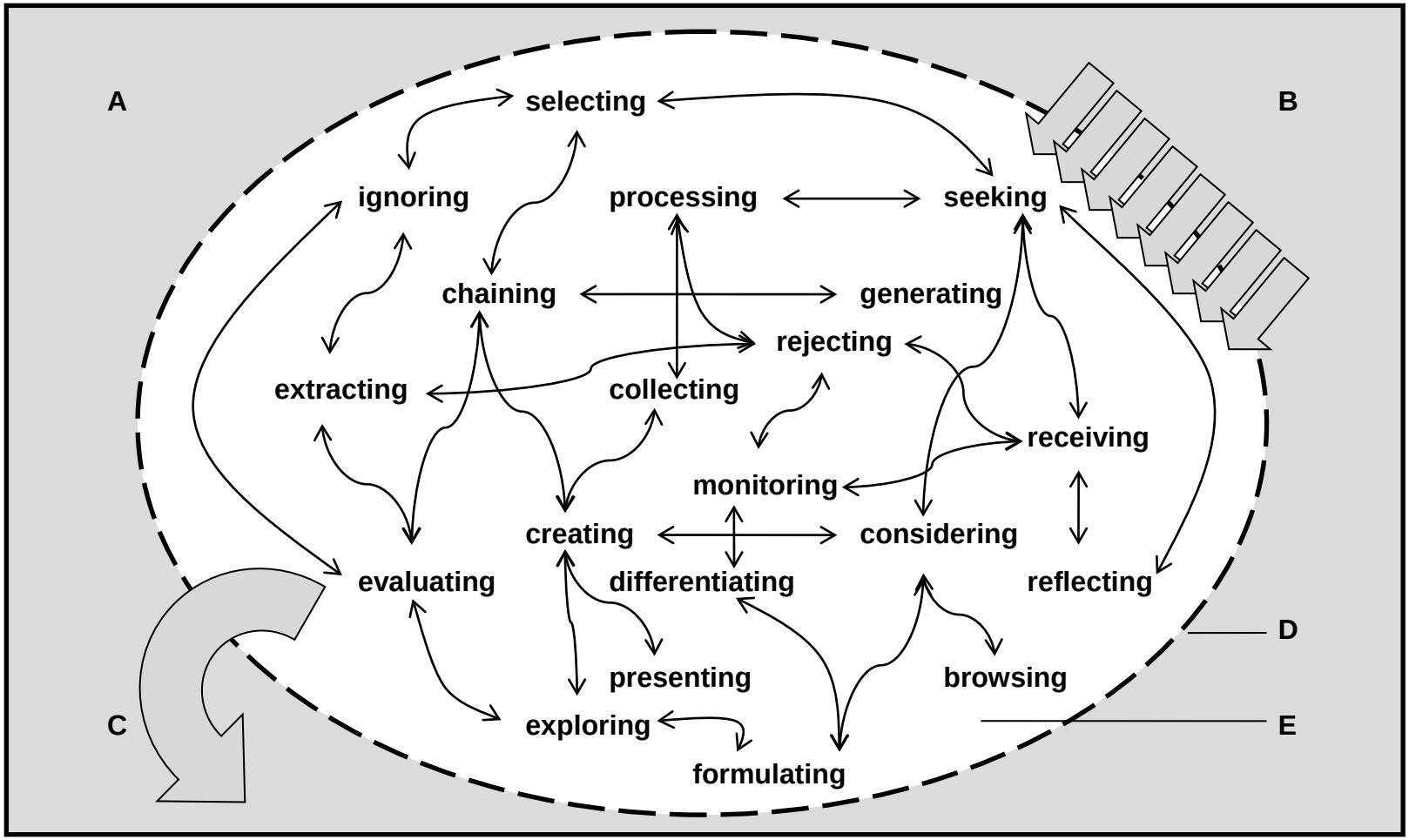

Figure 3: An illustration of the implications of a Slow perspective of information behaviour

Figure 3 above illustrates the implications of a Slow perspective on information behaviour. It disrupts received understanding of stage processes in both behaviour and literacy models in order to extend these notions to everyday information practices. It therefore challenges the instrumental, causal and temporal assumptions that exist in many existing theories of information behaviour through their focus on time-bound, snap-shot, task-based scenarios. These challenges are based on the evidence presented during the focus group, as well as observations made by the Delphi participants.

The grey backdrop of the diagram (A) represents the pervasive and experiential influence of information in daily life. Rather than an instrumental view of information which inserts objects or sources into a linear process, this view holds that information is a constant and constituent part of the contemporary social condition. A protective ring or buffer zone (D) encircles the information communicator and their central information behaviours, which nevertheless remain relevant to this everyday view.

The flow of information is illustrated by the large grey arrows: information is pulled or pushed towards the centre (B). It may be pulled inwards by an individual to fulfil a need, as in existing models, or for undirected, random or leisurely pursuits. It may also be pulled inwards as a result of internally felt pressures or compulsion. Information is simultaneously pushed towards the centre as a result of social or institutional pressures which encourage information to flow through the protective ring. The position of these arrows in the diagram is not significant: information is perceived to flow from all directions.

Information may also flow outwards as a result of the information interactions which occur within the buffer zone. This is represented as arrow C. This production of information is subject to the same pressures as the inward flow, and is selective rather than inevitable, according to the individual communicator’s perspective and emotional response to the pressure. The pressure to produce information, as reported during the focus group, can initiate withdrawal behaviours which might be seen as a tightening of ring D.

The buffer zone (D) incorporates those behaviours and attitudes which are undertaken to regulate the flow of information. These may be Slow behaviours, as reported in the focus group findings, or they may involve standard filtering and organisation skills such as are emphasised in existing definitions of information literacy. This might therefore also be termed the 'literacy ring' wherein an individual builds "a personal information style" (Bruce, 1997) in order to manage the enveloping information landscape. The zone is shown with a dashed border to illustrate that it is not a barrier but that information flows both ways across it.

When actions and attitudes within the buffer zone maintain an even flow of information, the situation exhibits informational balance. When the flow of information towards the centre overruns the buffer zone, overload and information illiteracy occur. This can be for internal reasons, such as compulsion, or external pressures as described. The buffer zone also implies a temporal pause and the opportunity to make conscious efforts to step back and reflect on situations, as described during the focus group. Again, when the capacity for reflection is overrun by the pressure to manage incoming or outgoing information, overload can occur.

Within the buffer zone (D), central information behaviours exist (E). This perspective is not intended to disrupt the notion of information behaviour *per se* but the fixed process of existing models, and so established terms are included here. The behaviours are those outlined in Ellis and Kuhlthau (1.2.1.5, pp. 26-28), those suggested during the Delphi (3.11.5, p. 190) and during the focus group (4.9.3, p. 250).

These are broken out of their fixed stage processes to illustrate the non-linear nature of information behaviour in contexts beyond task- or goal-oriented contexts. Once information has been pulled or pushed within the buffer zone, a decision must be made to process it in some way. There are no fixed start- or end-points, because information is not perceived as solely instrumental, and the process is not tied to a causal series of events. 'Rejecting' could follow or precede 'selecting', for example. However, some behaviours are undoubtedly linked in a causal way, in that one must occur before another. 'Presenting'

would have to succeed some form of selection of differentiation process, for example.

The lay-out of behaviours within E also illustrates that the temporal distance between them may differ. The arrows between each behaviour represent the different amounts of time it may take to move from one to another, and this indicates the temporal fluidity of each behaviour. More time may be spent on ‘browsing’ than on ‘extracting’, for example. This is in contrast to the equal stages in task-oriented searches implied by existing models. The arrows within E are not intended to describe reported processes in either study, and are included as possible examples. In some situations, it is likely that a single behaviour, such as ‘exploring’ occurs. In others, a complex interplay between behaviours may be necessary.

The premise of the diagram is that an information communicator strives to attain informational balance on a daily basis. The buffer zone affords them the opportunity to engage in the critical thinking that underpins information literacy, and that therefore regulates the information flow that they experience.

5.3 The research landscape

With the preceding findings in mind, this chapter moves to understand where these points sit in the research landscape, and what difference it makes that this new knowledge exists. Firstly, attention turns to life in the information culture with particular attention paid to the notion of informational balance, and then moves on to how we might reframe the research agenda to better investigate related social phenomena.

Understanding patterns of behaviour is a fundamental concern of applied social research. The purpose “is to contribute knowledge that will help people understand the nature of a problem in order to intervene, thereby allowing human beings to more effectively control their environment” (Quinn Patton, 2002, p.217). This project is an example of applied research and as such, this section seeks to outline how the new knowledge presented above may be used to facilitate more effective control of the information landscape.

5.3.1 The information culture

The notion of the ‘information culture’ was introduced in Chapter Two as a way of describing the cultural significance of dynamic information flows (2.2, pp. 85-96). This notion rested on a synthesis of Frank Webster’s definitions of the Information Society and Raymond Williams’ etymological interpretations of the word ‘culture’. The pervasive everyday relevance of ‘information’ was thus initially introduced conceptually, and during the Delphi and focus group studies, was then supported by disciplinary perspectives and by reported experience (3.11.4, p. 188 & 4.9.3, p. 250).

The idea of the information culture extends an established tradition of assessing how information intersects with the social condition. It is this project’s argument, and finding, that in order to better understand the role of information in society, it should be acknowledged as a constituent element of experience, rather than an instrumental object to be called upon when a need arises. How individuals

manage the ‘push’ nature of much information communication (i.e. information which is delivered regardless of need) is an under-researched and pressing concern. This type of information is characteristic of the information culture.

The notion of the information culture provides a novel seam of interest for exploring the interface between information, society and culture. Exploring and observing this interface would give rise to a better understanding of its inherent problems and consequently provide the knowledge needed to exert better control over it. Suggestions for research of this kind will follow, but further conceptual refinement is also needed. Further work with Raymond Williams’ perspectives would develop the concept and, in addition, there is potential for synthesising the views of other sociologists. In particular, Pierre Bourdieu’s dominance theories would shed light on information overload as an established and accepted norm at the broadest societal level (e.g. Bourdieu & Passeron, 1990). This could be used as a framework to investigate the unwillingness and/or inability to adopt Slow principles in many information interactions.

So too, the works of Manuel Castells in relation to time and networks would enrich the overall conception, to understand the information flows that occur within the information culture as knowledge communication (e.g. Castells, 2000). Castells’ theories of informational power could also be used in the analysis of qualitative data produced in refining the information culture, particularly between different stakeholders in library or information services (e.g. Castells, 2009). This type of analysis could establish a focus on the normative aspects of discussion, and how power relationships mould expectation within those services. The importance and centrality of information research to contemporary society would be emphasised through these refinements of the perspective.

5.3.2 Informational balance, information literacy & a 'domain of the everyday'

The premise of the information culture implies pressure exerted on the information communicator from rapidly and expansively pushed information. Pressure can also arise from internally generated needs or desires, which can pull excessive information within the buffer zone described in Figure 3 (p. 275). When too much information disrupts an individual's capacity to manage its flow, overload occurs. Overload can be thought of as hindering information literacy because it has the capacity to unsettle an individual's informational balance. Informational balance is managing how much information is pulled or pushed through the buffer zone, so that there is time and space to apply the skills and attitudes required to be information literate. Maintaining informational balance therefore encourages effective and efficient information use, at both personal and institutional levels.

This notion relies on a reimagining of what is meant by 'information literacy' and when it is applicable. The Delphi study brought together perspectives of literacy, during which discussion emerged as to the domain-specific nature of the concept. Informational balance can therefore be described as supporting information literacy which applies to the everyday information domain. This rests on the assertion that there are indeed some skills, behaviours and attitudes which can be employed to maintain informational balance on a daily basis (such as filtering, purposive withdrawal and reflection).

In order to more fully understand both the generic skills and nuanced attitudes required to attain such literacy, further work is required to build this previously unreported information domain. A starting point for this work lies in Birger Hjørland's 11 approaches to domain analysis (Hjørland, 2004) which could individually, or collectively, be used to specify the relevance of the concept to Library & Information Science. Admittedly, everyday life cannot be viewed as a knowledge domain in the same way as, for example, art or engineering, since the infinite variety of human experience is under scrutiny. Some of Hjørland's approaches may not therefore be relevant. Nevertheless, applying these approaches to the everyday domain would reiterate information's central role in

daily life, and highlight the need for ongoing balance and consequent everyday literacy.

The approaches are listed here, with some examples of how they might relate to this project.

1) Producing literature guides
2) Producing special classifications (e.g. the rise of social tagging)
3) Research on indexing and retrieval specialities (e.g. the use of hashtags and lists to organise information in social networks)
4) Empirical studies of users in different fields
5) Bibliometrical studies (e.g. ‘retweeting’ as citation)
6) Historical studies of information exchange
7) Document and genre studies
8) Epistemological and critical studies (e.g. the balance of power in the ‘push and pull’ of everyday information flows)
9) Discourse studies
11) Studies of structures and institutions in scientific communication
12) Professional cognition and artificial intelligence

In pursuing these strands of enquiry, an information domain of everyday life may be built and, as such, the need for an appropriate interpretation of information literacy would be emphasised. This interpretation asserts that reflection and constant critical awareness can provide the time and space away from the pressures of speed and scale, which in turn encourage the selection of appropriate tempos and an ensuing efficiency of information use.

5.3.3 Breathing spaces

Although informational balance is tied to everyday experience, it may be that those best placed to encourage it are involved in the provision and design of library and information services. The key elements of critical reflection and breathing space are relevant to specifically informational environments too, and

recognition of the value of these aspects of information behaviour could impact on the ways in which space is designed and literacy education is delivered. Further work is required in these areas to ascertain the implications more fully.

The impact of physical breathing spaces within library buildings has received some attention in the literature. Kao & Chen (2011) cite a 2005 Association of Academic Health Sciences Libraries survey which concluded that there was a requirement “to shelter quiet, contemplative spaces from talkative readers”, and this perhaps could be extended to the need for shelter from the constant communication of information. The library in this example sought to provide a relaxing space through the use of playful design, including rocking chairs, swings and cherry blossom. A survey of user satisfaction concluded that the introduction of this comfortable space had been a success in “providing a location for stress-free reading, relaxation of mind and body, and even academic discussion” (Kao & Chen, 2011, p. 84).

According to McDonald, the characteristics of an ideal academic library are that it is “functional, adaptable, accessible, varied, interactive, conducive, environmentally suitable, safe and secure, efficient and suitable for information technology” (McDonald, 2006, p. 3). In order to promote information balance within the library environment, each characteristic could be assessed alongside a space’s capacity to promote different tempos of information use. For example, studies could explore whether users have the opportunity to seek and use information at a variety of tempos within a particular space, or whether the environment is suitable for reflection and, if necessary, withdrawal. Attention to these elements could help promote “academic literacy”, a concept which is closely tied to the design of information spaces on campus (Beard & Dale, 2010).

The notion of breathing space is temporal, as well as physical. As shown during the focus group, some information behaviours are engaged with in order to decelerate the rate of activity. This was illustrated by the buffer zone (E) of Figure 3. This too should be a concern of library and information service providers, particularly in relation to the provision of information literacy education. Alongside the practical skills which constitute many library induction

and literacy programmes, and which are increasingly vital in a landscape of varied search interfaces and possible sources, the introduction of mindful techniques could serve as an overarching attitude with which to approach information. This could break information literacy out of its formal applications by applying more general cognitive methods of awareness and reflection.

For example, the Mindfulness Online course, run by the UK's Mental Health Foundation, encourages "us [to] become more aware of our thoughts and feelings so that instead of being overwhelmed by them, we're better able to manage them" (Mental Health Foundation, 2012). The objective of the course is to encourage paying attention to the present moment and consequently, feel more in control of time, pressure and emotions. This specific course has been found to significantly reduce perceived stress (Krusche et al, 2012), and could be used as a framework for pre-emptively equipping users in library settings, and the information communicator at large, with ways of managing information pressure and overload.

The provision of breathing spaces also has implications for organisations and institutions. This is particularly relevant given the focus group's themes of work- and colleague-based pressures. Effective information use can lead to greater productivity at work (Edmunds & Morris, 2000), and the introduction of techniques to encourage management of information flows within an organisation could support that. There is a requirement for more sophisticated strategies than "Email Free Fridays" which simply postpone the pressure until Monday (Palmer, 2011). Mindfulness, for example, could equip individuals with the capacity to understand how their information production impacts on colleagues.

In both physical and temporal terms, breathing spaces can support informational balance which has been conceptualised as a means of achieving everyday, as well as library- and work-based, information literacy. Having, or creating, the opportunity to reflect on what is adequate and what is excessive may also have implications for information compulsion, as reported during the focus group. The framework of mindfulness could again prove particularly useful in breaking compulsive cycles of pulling information within the buffer zone,

largely by emphasising that these distinctions are important in the avoidance of overload. Information compulsion is itself under-researched and would constitute a rich field of empirical study, as per Hjørland's domain analytic approach.

5.3.4 The Slow social construction of research

As discussed in Chapter One, the methodological approach of this project dictated that certain methods, or research mechanics, were appropriate to the piece. This was influenced by Brenda Dervin's intentions for Sense-Making. The conscious meshing of methods and methodology ensured that the mechanics of the two studies emphasised the epistemology behind them, which is that knowledge is generated in social constructivist ways. This was in turn influenced by the Slow principles which the project set out to explore, in particular that there is a social responsibility inherent in all behaviour to share knowledge and make connections.

The studies were therefore designed as discursive processes wherein participants were able to consider their responses in light of other contributions. The data generated from each study was subsequently analysed through qualitative interpretation, overlaid with elements of Constructivist Grounded Theory. These choices support the overall intention for the project to be an example of applied social research which reflects the object of its study. There are further opportunities to refine the approach which can also be seen to relate to Slow principles.

The social aspect of research design can be emphasised through the use of discursive elements and group processes, wherein individuals are brought together to share their experiences and refine their perspectives through discussion. An extension of this project's design could lie in gathering together different stakeholders of an organisation to discuss their potentially contrasting views of a particular problem. Whilst too great a contrast may hinder the group process from working effectively, the strengths and weaknesses of a situation

may more fully be exposed through this variety of perspective. Points of tension, and of corroboration, between different parties would emerge. For example, a focus group which brings together librarians and users could highlight differences of service expectation.

Moreover, a social process could be used to better understand the impact of information flows which exist in organisational settings. Managers could, for example, better understand the pressure exerted upon their staff by excessive information flows within an organisation. The process would have to be thoughtfully designed so that members of the group are not inhibited by each other. Nevertheless, discussion may reveal more fundamental differences of opinion than face-to-face interviews, as participants reflect on how their perspective relates to that of their group peers, and, for example, discover consistent pressures across the hierarchy. The focus group setting, however, is not a therapy or decision-making session, but should be designed to facilitate the sharing of knowledge and experience from which solutions to problems may be devised.

The constructive element of research design could also be extended. In this project, constructivism was reflected in the emphasis on discussion and sharing, with the intention of building a collective understanding of the issues at hand, though not necessarily consensus about them. As suggested previously (5.3.1, p. 281), applying aspects of Manuel Castells' theories of informational power could establish a focus on the normative aspects of discussion, or how and why participants arrive at certain perspectives or beliefs. To use the organisational example from above, such an approach could expose where the informational power lies amongst participants and how different perceptions of that power affect the movement of information throughout the organisation.

Moving towards a constructionist approach to analysis could expose normative processes inherent in the discussion data. Adopting a linguistic or discourse analytic approach could highlight how value judgements are socially contrived and perpetuated. For example, the negative avoidance and withdrawal terminology used within the LIS discipline could be explored. In particular relation to this project, further work on the connotations of informational

consumerism could illustrate its role in everyday life. In a broader social context, this type of analysis could provide greater clarity on whether and how consumerist drivers dominate contemporary developed society, as reflected in attitudes to information seeking and use.

Lastly, the notion of everyday life offers multiple research sites and avenues for exploration. Slow principles are applied to many, often mundane, aspects of daily life and this project therefore took the view that daily life was the appropriate research arena. As has been shown, much information behaviour work concentrates on snap-shots of information seeking, with little acknowledgment of the role that information plays beyond that isolated process.

One way of emphasising that life does exist outside of that moment would be to devise longitudinal studies. This kind of research would not only emphasise the ongoing aspects of information literacy and balance, but would allow the observation of changes over time. These changes might relate to what information means to individuals, or to how groups of people modify their interactions with each other and manage the information flows between them. This could prove especially useful in organisations, as well as on an individual level, for example in relation to the efficacy of mindfulness.

5.4 Final thoughts

This project has shown that there is a desire for informational balance in both theory and practice. Informational balance exists when flows of information are under control. This then allows information literacy to flourish. Slow information behaviours exist as a component of informational balance, as a means of creating breathing space between information and the behaviours which are then employed to absorb, process, use or reject it.

In a social landscape characterised by the acceleration, and subsequent proliferation, of information channels, informational balance is elusive and requires conscious and critical effort to maintain. Adopting Slow principles to achieve such balance could allow us “to experience ourselves as capably and sensitively attuned to our fast-moving environment and so as existentially flexible, responsive and resilient” (Tomlinson, 2007, p. 159).

5.5 Chapter Five references

Beard, J. & Dale, P. (2010) 'Library design, learning spaces and academic literacy', *New Library World*, 111 (11/12) pp. 480-492.

Bruce, C. (1997) *The seven faces of information literacy*, Adelaide, Australia: Auslib Press.

Bourdieu, P. & Passeron, J.-C. (1990) *Reproduction in education, society and culture*. 2nd edn. London: Sage.

Castells, M. (2000) *The rise of the network society. The Information Age: economy, society and culture, volume 1*. 2nd edn. Oxford: Blackwells.

Castells, M. (2009) *Communication power*. Oxford: Oxford University Press.

Charmaz, K. (2006) *Constructing grounded theory: a practical guide through qualitative data analysis*. London: Sage.

Edmunds, A. & Morris, E. (2000) 'The problem of information overload in business organisations: a review of the literature', *International Journal of Information Management,* 20 (1), pp. 17-28.

Hjørland, B. (2004) 'Domain analysis: a socio-cognitive orientation for Information Science', *Bulletin of the American Society for Information Science & Technology*, 30 (3), pp. 17-21.

Kao, P. & Chen, K.N. (2011) 'A park in the library: the 'New Reading Paradise' in the National Taiwan University Medical Library', *New Library World*, 112 (1/2), pp. 76-85.

Krusche, A., Cyhlarova, E., King, S. & Williams, J.M.G. (2012) 'Mindfulness Online: a preliminary evaluation of the feasibility of a web-based mindfulness course and the impact on stress', *British Medical Journal Open* [online], 2 (3), article # e000803. Available: http://bmjopen.bmj.com/content/2/3/e000803.full (Accessed: 22 June 2012)

McDonald, A. (2006) 'The Ten Commandments revisited: the qualities of good library space', *Liber Quarterly*, 16 (2), pp. 1-10.

Mental Health Foundation (2012) *About mindfulness*. Available: http://www.bemindful.co.uk/about_mindfulness (Accessed: 22 June 2012)

O'Connor, L. (2009) 'Information literacy as professional legitimation: the quest for professional jurisdiction', *Library Review*, 58 (4), pp. 272-289.

Palmer, M. (2011) 'The end of email?'. *Financial Times, The* [online], 19 December. Available: http://www.ft.com/cms/s/0/5207b5d6-21cf-11e1-8b93-00144feabdc0.html#axzz1yW6O07Pr (Accessed: 22 June 2012)

Quinn Patton, M. (2002) *Qualitative research & evaluation methods.* 3rd edn. London: Sage.

Tomlinson, J. (2007) *The culture of speed: the coming of immediacy*. London: Sage.

Wilson, T.D. (1999) 'Models in information behaviour research', *Journal of Documentation,* 55 (3), pp. 249-270.