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Information Seeking and Interest in the Paranormal

Towards a Process Model of Information Action

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ACADEMIC DISSERTATION

To be presented, with the permission of
the Faculty of Social Sciences of the University of Tampere,
for public discussion in the Paavo Koli auditorium of the University,
Kanslerinrinne 1, Tampere, on October 5 th, 2001, at 12 o'clock.

Acta Universitatis Tamperensis 826
University of Tampere
Tampere 2001

ACADEMIC DISSERTATION
University of Tampere,
Department of Information Studies
Finland

Distribution

University of Tampere
Sales Office
P.O. Box 617
33101 Tampere
Finland

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Fax +358 3 215 7685
taju@uta.fi
http://granum.uta.fi

Cover design by
Juha Siro

Printed dissertation
Acta Universitatis Tamperensis 826
ISBN 951-44-5133-3
ISSN 1455-1616

Electronic dissertation
Acta Electronica Universitatis Tamperensis 118
ISBN 951-44-5134-1
ISSN 1456-954X
http://acta.uta.fi

Tampereen yliopistopaino Oy Juvenes Print
Tampere 2001

Abstract

This doctoral thesis explores the process of information action in the context of interest in paranormal phenomena as an instance of a leisure time venture. The topic was chosen for two reasons: on one hand, pursuing the supernatural — or any other hobby for that matter — is a domain on which research has been virtually nonexistent in information studies so far. On the other hand, the contemporary conceptualisations of information behaviour and sense-making were deemed insufficient and thus requiring further development through empirical investigation, so that they would be better suited to examining processes and free time activities. This piece of research looks at needs, seeking and outcomes of information concerning the paranormal — as well as barriers to these — in real-life situations, as experienced by people who are keen on the supernatural. The features that centrally characterise the study are its focus on the individual, situation, and process. Special attention is paid to paranormal meanings that are given to things in everyday information-related activities. This is facilitated by taking Brenda Dervin's Sense-Making theory as a metatheory or background theory for the study. Owing to the phenomenological approach and the as-yet disputed nature of supernatural phenomena, the study does not take any stand whatsoever on their existence.

The content of information action is conceived as five stages — 1) situation (consisting of Situation Movement State, motive for action, and paranormality of situation), 2) information need (topic, 10W Focus, and Time Focus), 3) information source (type, tactic of seeking, and chooser), 4) obtained information (topic, Time Focus, and method of reception), and 5) information outcome (use and effect) — as well as a factor having an adverse effect on information seeking: barrier (type and stage). The process of information action is basically envisaged as comprising of the five phases.

The research data was gathered by taping the interviews of 16 people interested in paranormal phenomena. The interviews were conducted in Finland in 1995, except for one that was done in 1998. The specific method of data collection was an application of the so-called micro-moment time-line interview which is the core method of Sense-Making. This technique involves the charting of chains of events, as they happened according to the interviewees. The material thus acquired was transcribed in detail, minutely coded in a qualitative data analysis program, analysed qualitatively to find categories and patterns, as well as investigated quantitatively in order to determine distributions and relationships between variables.

The most cardinal findings were as follows. *One:* the situation in which information action took place could itself be perceived as involving supernatural phenomena. *Two:* information was mostly required about normal rather than paranormal matters. *Three:* some people consulted information sources which they regarded as paranormal. *Four:* information could seemingly be obtained via supernatural modes of communication. *Five:* paranormal information was felt helpful. *Six:* barriers to seeking paranormal information were relatively uncommon, but when they did arise, they were probably related to the individual himself. *Seven:* two fundamental process dimensions — unit and scope — were identified. The paranormal could be perceived as manifesting itself in a number of thought forms and phenomena, and practically at any stage of the process of information action. It appears that the essence — but not process — of information action in the context of the paranormal differs from normal information action in many important respects, although they have their similarities, as well.

The piece of research at hand introduces a great many novel categories, several subconcepts, and even three basic concepts. Some of the constructs specifically deal with the paranormal, but most of them are pertinent to the wider context of people's everyday life, leisure time, interests, and hobbies. The most central theoretical implications for information seeking research in general are the following. *One:* the motivations behind searching for information are much more heterogeneous than presumed by the rationalistic "school of problem-solving". *Two:* the questions representing information needs are more versatile than what has been believed to date.

Three: the present-day scientific endeavour in our field pays inordinate attention to documentary and especially electronic sources and systems, at the cost of personal and less technical originators and providers of information. *Four:* exploring the perceptual potentiality of the human being for obtaining and processing information has been forgotten in information studies. *Five:* it is proposed that the previously ambiguous ”information use” is relegated to the subordination of the more general ”information outcome”. This is a process whose latter ”substage” is information effect. *Six:* barriers do not disturb information seeking only, but can emerge in any phase of the process. *Seven:* it was found that the process of information action is a complex, non-linear and multilevel phenomenon. Many of the categories and concepts in the current investigation can be exploited not only in information studies, but also in Sense-Making.

As a whole, the concepts and their interrelationships constitute a framework which pertains to three theoretical perspectives: information action, process, and sense-making. The thesis advises the scholarly community to replace the mechanistic term of ”information behaviour” with that of ”information action” which underlines the intentionality of human existence. The study develops a model of process, as well, which outlines the processes of information seeking and action in unparalleled depth and width. The Sense-Making theory is not spared from revisions, either, which principally concern the concepts of gap-bridging and use. The greatest theoretical merit of this piece of research is that of contributing to our understanding of information action as a genuine process. Among other things, this conceptualization has consequences for the methodology of information seeking research.

Foreword

This study was originally born from a genuine desire to examine the combination of information seeking and the paranormal in everyday life. Why? Because information seeking is such a central activity in human life, but there has been relatively little research on it outside work and information system contexts. Because the paranormal — with its subjective, controversial, and utterly mysterious nature — is *the* place where science should by definition be exploring.

In retrospect, the making of this dissertation was a long and arduous — and yet, worthwhile — process. It started out with planning in 1994 at the Department of Information Studies, University of Tampere, while I was engaged in doing my master's thesis. The data was gathered through interviews in 1995. Originally, these interviews were meant to be a part of my master's thesis, but the sheer bulk of the information turned out to be absolutely overwhelming. Therefore, I deemed it wiser to save the interview material until later. It was only in late 1996, after finishing the master's thesis, that I was able to commence my doctoral research. The first year (1996-97) mostly passed with reading and graduate studies. In the second year (1997-98), alongside being taught, I at last had the time to transcribe the interviews, which was probably the most frustrating phase of all. The third year (1998-99) involved coding the data, which — despite its long duration — started to hint at the possibility that this study might succeed after all. In the fourth year (1999-2000), the interview material was analysed, and the writing of the thesis was embarked on. The report at hand was finally composed and polished during the fifth year (2000-2001). This last year was a time of growing anticipation, as it became evident that the research could be concluded and at least with a satisfactory result.

The end product which you are currently reading is in several ways quite different from what I aimed at in the beginning: over the years, many elements were changed, some were discarded, and some new components were added, too. Even though I did my very best all through the project, various shortcomings were eventually revealed in the study. Nonetheless, I learnt much about both the object of the investigation and doing scientific research. I hope this thesis will be illuminating to those who wish to understand the supernatural in information action, and lead to further research on the paranormal, on the one hand, and on the process of information action, on the other hand.

I owe my sincere gratitude to a host of people and organizations for contributing to the advancement of my dissertation. First of all, I thank the 21 interviewees for providing me with the raw material without which this piece of research would not have come into existence. I acknowledge the personnel (especially Arja and Tapani Kuningas) of *Ultra* magazine for assisting me in locating the majority of the interviewees. The fellows of REGIS (Research Group on Information Seeking) — and other colleagues met at various conferences and seminars deserve my appreciation for giving me encouraging and sound advice. Among these scholars, I especially thank the four reviewers — Elfreda Chatman, Lars Höglund, Hannele Koivunen, and Sanna Talja — as well as a senior staff member of our department — Pertti Vakkari — for their thoughtful statements that helped me improve on the quality of this dissertation. I could never have imagined how thoroughly my piece of research would be examined! Most of all, however, I would like to extol my advisor — Reijo Savolainen — for his constructive comments and his support even in times of desperation.

I am also grateful to the Department of Information Studies at the University of Tampere for allowing me to use their facilities and services. The University of Tampere and its Department of Information Studies, as well as the Science Fund of Tampere City, NordIS-Net, and INVA (the National Doctoral School for Information and Communication Sciences) supported a noble cause with their scholarships, so my gratitude extends to them, too. I also wish to praise my family — Xiang Ai, Esa, Vesa, and Elisa — for their all but infinite patience and understanding, as well as for their simply being there to bring me happiness during the hard work. Last but not least, I am immeasurably thankful to the Universe for offering me this opportunity to fulfil myself

by adding my modest share to the evolution of science and humanity.

Tampere, 28 May 2001 Jarkko Kari

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1 Introduction

> ”The proper place for scientists — once in a while at least — is in the midst of the unknown, the chaotic, the dimly seen, the unmanageable, the mysterious, the not-yet-well-phrased.”
>
> *(Abraham Maslow, 1987)*

The current doctoral dissertation sets out to probe the long-neglected and even dreaded territory of the paranormal or supernatural by looking at real-life, situational information action in this context, as perceived by people who are keen on supernature. This activity is treated as an instance of searching for information in leisure time. Research on information seeking may be observed to have two chief functions: to develop theory and methodology, and to improve library and information services (Johnson 1996, 135; Savolainen 1999b, 73). The two primary objectives of this thesis cover both theoretical and empirical arenas. The *theoretical* goal is not to test an existing theory, but to develop a model of information action as a process, and ponder how analysing spare time information seeking may transform our accustomed conceptions of human information behaviour. The direct *empirical* goal is not to refine information systems, but to gain a comprehensive understanding of information action in the context of interest in paranormal phenomena.

Based on the state of and demands for research presented below, the nature of the current study is as follows. The thesis is explicitly a journey of exploration into the Unknown in a sincere effort to genuinely apprehend informational notions and experiences of the paranormal as a case of information seeking in connection with hobbies. Accordingly, the research setting is more descriptive than explanatory: the primary endeavour is to find out *what* things are like, and of secondary interest only is *why* things are as they are. Information action is examined from the individual’s perspective and in a situated fashion. Narratives of real-life occurrences comprise the research data. These were told by ordinary people belonging to the peripheralized group of devotees of the paranormal. The study operates in a particular domain that ought to be obvious by now: the paranormal. The starting point is to conceptualize informational phenomena from the angles of sense-making, action and process. The undertaking proceeds from here by taking all stages of this action into account as equals, and enquiring into how they form a dynamic process as a whole. The gathering of the empirical material was not only grounded on theory, but it also serves as fodder for theoretical evolution. A basically qualitative approach was opted for due to the very alienness of the research area.

The dissertation at hand is a sequel to my master’s thesis (Kari 1996; see also Kari 1998b), and their purpose is to complement each other. These pieces of research both deal with people interested in supernature and their information seeking related to this preoccupation, although the theoretical foundations and methods used in the two investigations are quite divergent. This study is predominantly founded upon the premises of Brenda Dervin’s (e.g. 1983b, 1992, 1999b) theory of Sense-Making[1]. The data was collected by applying the so-called micro-moment time-line interview technique, and the interviews were examined by using content analysis. Many of the central empirical findings of the current research pertaining to the supernatural have been reported in two papers (Kari 2000; Kari 2001).

The expedition of the dissertation proceeds in the following manner. This first chapter (1) gives a very broad outline of the nature and current situation of the theoretical and empirical research domains of the investigation at hand: information seeking and the paranormal. Chapter 2 presents prior relevant research and its results at the intersection of the two areas. Chapter 3 lays bare the theoretical starting-points and poses the research questions. Chapter 4 gives an account of the research methods, all the

[1] Henceforth, I refer to the approach with ”Sense-Making”, and to the phenomenon with ”sense-making”, as recommended by Dervin (1998).

way from data gathering to its final analysis. Some relevant background information concerning the participants' demographics and opinions is given in chapter 5. The panoply of findings proper are exposed in chapters 6 and 7 which also put them into a dialogue with earlier results. The sheer bulk of the discoveries requires two separate chapters. Chapter 8 summarizes the findings and brings forward novel theoretical ideas. What is more, it suggests methodological betterments and proposes directions for further research. To conclude, chapter 9 deliberates on the practical and scientific significance of the new findings and theorizings.

1.1 Information seeking

The thesis at hand operates in one of the core areas of information studies, in the segment that has conventionally been called ”information seeking research” (see Järvelin 1989, 55; Savolainen 1999b, 73; cf. Järvelin & Vakkari 1993, 139). This field actually encompasses the examination of information needs, seeking and uses (Byström 1999, 15, 21; Kokkonen 1998, 25; Savolainen 1999b, 73, 79), but the middle element has clearly been dominating. The investigation into information seeking started back in 1948 (Hjørland 1998, 610), and has bred literally thousands of studies since that time (ibid.; Wilson 1999b, 250).

Kimmo Tuominen and Reijo Savolainen (1997, 81) believe that the foremost mission of information seeking studies is to further our comprehension of what the role of information is in everyday life. According to Oili Kokkonen (1998, 26), on the other hand, the fundamental question in this area is how to track the formation of knowledge. In Suvi Perttula's view, the study of *information action* — which embraces a wider range of functions than information seeking — aims at discovering regularities in activities and characteristics of sense-making. Examples of the kinds of questions that are sought to address include ”how people act, how information influences the individual and benefits him[2], and how information clarifies a problem or situation”. So as to be able to answer these questions, scholars also ”scrutinize the contexts in which information needs arise”. (Perttula 1994, 38.) Information action can be tentatively defined as a purposive process incorporating information needs, seeking and outcomes.

For some time now, something that could almost be called a necessary consensus on the primacy of the individual's perspective, as opposed to that of the system or observer, has also prevailed (see Hewins 1990, 154; Järvelin & Vakkari 1993, 140). This is because information seeking is inherently activity in which the actor is the focus of attention, since the world is observed through his ”senses” (Dervin 1980, according to Johnson 1996, 143). The centring on the actor has increasingly meant emphasizing information seeking as constructive activity which is affected by contextual factors (Limberg 1998, 16; Savolainen 1999b, 97). William and Sandra Rouse (1984, 129) even affirm that ”it is difficult to study information seeking independent of a particular context or process”.

It must be acknowledged that there are still many underdeveloped regions in information seeking research that should be attended to. I shall deliberate on those weaknesses of which the work at hand is heedful. First, Maxine Reneker reckoned in 1993 (p. 488) that the majority of studies on information seeking may be either ”irrelevant or superficial”, since their main findings deal with what kinds of sources or channels are used to search for information (see also Järvelin & Vakkari 1993, 139; Savolainen 1999b, 74). A token of this bias is the fact that there has not been enough research on information needs (see ibid., 83). Lars Seldén (1999, 70) even goes so far as to assert that the study of information needs ceased long ago (see also Bruce 1997, 324). Similarly, there have been relatively few studies on information use (Hewins 1990, 155; Rich 1997, 12; Tuominen & Savolainen 1997, 81; Vakkari 1997, 452; Wilson 1999b, 251; cf. Ford 1977, 70), even though this area may be considered as the most essential one in information seeking studies (Tuominen 1996, 3). Most research on information

[2] Although I utilize the male pronoun throughout the dissertation for the sake of consistency when the actor's gender is irrelevant, no sexism is intended. Everything that is said equally applies to both genders, unless specifically noted otherwise.

behaviour has implicitly concentrated on the transfer of information, as if internalizing information were an adequate outcome of searching (Dervin 1999b, 740). How information is actually used and what corollaries this has must be studied, too (Paisley 1968, 2; Tuominen 1996, 3). This scrutiny ought to be both conceptual and empirical by nature (Rich 1997, 22), and be closely ”connected with the individual’s action” (Savolainen 1999b, 104). It is a positive sign that in recent years, research on the utilization of information has been on the increase (Savolainen 1999a, 78; Savolainen 1999b, 101, 107).

Research has usually concentrated on specific parts of information action, which has not allowed us to form a real understanding of the individual’s information seeking activity as a whole (Reneker 1993, 488). Fortunately, there seems to have developed an aspiration to cope with information seeking more holistically (see Choo 1998, according to Savolainen 1999b, 106) in late years. If we really strive to understand the role and meaning of information in everyday action, it is insufficient to merely examine information needs and seeking: information use should be incorporated in the analysis, too (Tuominen 1996, 3; Savolainen 1999b, 106), so that the various components may be looked at as a whole (ibid., 105). Savolainen (ibid., 101) points out that studying information needs and seeking makes no sense if the researcher does not also ask what is done with the received information or how it helps. As it stands now, however, holism of this type is still rather uncommon.

There is the moderately novel idea of studying information seeking in context, which did not emerge until the 1990’s (Cheuk & Dervin 1999). Pertti Vakkari (1997, 451) claims that the approach of ”person in context” has already overtaken the mere ”person-centered” one. Still, Oili Kokkonen (1998, 25) wonders whether information seeking varies from one sphere of life or environment to another, how necessary it is to examine these differences, and to what extent research of this kind can contribute to the elaboration of theories about information seeking. Carol Kuhlthau offers her assured opinion: ”To neglect context is to ignore the basic motivation and impetus that drives the user in the information seeking process”. Investigating the context makes it possible for us to come across basic, underlying concepts that help us apprehend information seeking more profoundly. (Kuhlthau 1999, 10.) Contextual research may actually produce fundamental constructs and theories that are relevant for all of information studies (ibid., 11, 18). Contextuality can be reached by scrutinizing information action in everyday life (Perttula 1994, 39).

So far the part of life which has been the target of information seeking research has quite unevenly been the context of work or studying. Inquiries into information action taking place in people’s free time — as when linked to one’s hobbies, for instance (Savolainen 1995b, 259) — have been comparatively rare specimens. However, since information is also searched for other than occupational or study purposes, this activity ought to be equally examined in other environments, as well. (Savolainen 1993a, 8; Savolainen 1995b, 259; Savolainen 1999b, 77-78, 100, 106.) Indeed, prior inquiries have even indicated that more often than not, information searching situations arise ”outside of work” (Chen & Hernon 1982, 17-18). Leisure-related information seeking is to be studied so that the research would be relevant to people, and the theory base concerning information behaviour may be further elaborated and tested. The cause for the shortage of research on pastime information seeking may be attributable to the fact that everyday life issues are seemingly so complicated and fuzzy phenomena, which is why this field offers scholars another genuine challenge (see Kokkonen 1998, 26; Savolainen 1993a, 8). As if in response to this, researchers’ interest towards leisure time information seeking has begun to grow during the 1990’s (Savolainen 1999b, 78, 106).

Related to the previous bias has been the tendency to look at information seeking with some special occupational groups instead of ”ordinary” people (Tuominen 1992b, 111; cf. Wilson *et al.* 1999, ch. 2.1). Yet, there is absolutely no evidence of why the ”average” person could not match specialists in terms of empirical or theoretical utility. It is our duty to also include in our analyses those parties that have heretofore been overlooked by mainstream research (Chatman 1996, 205). These groups could be communities that are marginal or marginalized in society.

A call has been presented for studying the meanings that are constructed by people to

make sense of their environment (see Savolainen 1998, 346). Examining interpretations enables us to tap diverse pictures of the world and points of view.

One of the most recent innovations in information seeking research has been the introduction of domain analysis by Birger Hjørland and Hanne Albrechtsen. Their basic tenet is that the value of examining information seeking rests on our capability to distinguish and analyse groups of people that are grounded upon some knowledge domain or discourse community (Hjørland & Albrechtsen 1995, 400). Sanna Talja (1995, 55) advocates a similar mode of investigation when she states that ”research should strive to adopt the various perspectives of interpretation that are born from living in different historical and cultural situations and different networks of social relationships”.

There has been very little awareness in our field of the association between knowledge formation and action. This issue has been explored in the philosophical branch of pragmatism (Venkula 1989, 21; Venkula 1993, 61; see also Cook & Brown 1999, 387). According to Venkula (1989, 21), however, there is a need to understand the connection between ”knowing” and ”doing” more profoundly than before. This end may be achieved by means of empirical research.

Although practically all social scientific researchers acknowledge the processual nature of human behaviour (and action), the conception has rarely been wielded in actual research (Dervin 1992, 65). This applies to information studies, as well, where the dynamic character of information seeking has not been properly endorsed in many studies (Cheuk 1999, 23, 27). Be that as it may, there have been some efforts to view information seeking as a process (see Vakkari 1997, 451; cf. Byström 1999, 21). This involves analysing informational activities as stages and sequences (Johnson 1996, 146), like in the process of information seeking and use (Savolainen 1999b, 107). This direction appears to lead into quite fruitful research (Johnson 1996, 146), for we still have only an elementary appreciation of the processes that urge information seeking (Reneker 1993, 487). Process conditions are a commendable and important object of study (Sonnenwald 1999, 178), because they allow us to see how people advance from one situation to another, how they estimate the situations, and how the situations arise, persist and change (see Shields & Dervin 1993, 74). The significance of processes is reflected in Jaana Venkula’s (1987, 35) thought: ”If we do not understand processes, we do not understand life and reality”, either. Now that the basic work in information seeking research has already been done, the time is ripe for tackling this challenge (Savolainen 1999b, 107).

Even though Oili Kokkonen (1998, 25) claims that information seeking studies have by now generated a solid theoretical basis on which to found research, it sounds more plausible that this field in fact suffers from a lack of central bodies of theory which might guide inquiries into information seeking (Chatman 1996, 193; Johnson 1996, 138). This state of affairs has been brought about by the non-accumulation of research (Hjørland 1998, 610): scholars have failed to draw upon earlier studies in such a way as to be able to add to the theoretical corpus and thus facilitate future research (Hewins 1990, 147; Vakkari 1997, 452; Wilson 1999b, 250). Designing new (or improving old) information systems or interfaces should not be the primary goal of information studies. We ought to aim higher, at building conceptual frameworks to direct prospective research. (Hewins 1990, 165.) Many scholars have for long demanded better theories on which to ground research (ibid., 147), but general models of information behaviour have only just started to manifest themselves (Wilson 1999b, 250). Given the multitude of potential factors influencing information action, the creation of generic theories is a truly formidable task (Savolainen 1999b, 100). On the other hand, there also appears to be a need to develop more specific theories dealing with the peculiarities of particular domains, as they could yield a richer picture of information seeking and resolve some methodological dilemmas. This sort of favouring of variation has not been one of the strong points of information studies. (Limberg 1999a.)

Qualitative research on information seeking has been lacking until recent years (Järvelin & Vakkari 1993, 140; Sonnenwald & Iivonen 1999, 430; cf. Wilson 1999a, 847). This methodological narrowness has meant that only knowledge of quite a limited kind has been produced (Järvelin & Vakkari 1993, 140). Quantitative research methods

have been found inadequate in explaining information action, because we do not really know what the main variables are and how they might be interrelated. In contrast, qualitative approaches seem to be particularly promising in this respect, since they are better suited to comprehending empirical phenomena. (Reneker 1993, 489, 490.) They are also an excellent cure for the shortage of theory (Wilson 1980, ch. 5). Under these circumstances, it is only natural that demands have been made for a wider employment of qualitative methods that are context sensitive (Kumpulainen 1993, 10-11). Some time ago, Vakkari (1997, 451) surmised that qualitative methods have already gained dominance over quantitative ones in the field of information seeking studies.

Studies of information searching have often limited themselves to more or less clinical laboratory approaches which have not been able to illuminate activities occurring in real life (Kuhlthau 1999, 10). Investigating into information action in naturalistic settings is by far the best way to obtain valid data (cf. Dervin 1989a, 79).

Lastly, as Tom Wilson (1980, ch. 8) propagated already some 20 years ago, researchers of information action ought to be willing to ”innovate and experiment”. The justification for this is provided by John Martyn (1974, 15): ”It is likely that, in the longer term, a fuller understanding will be built up through the results of the more speculative or exploratory studies”. Not very much has happened on this front, so the present dissertation is an effort to do something about it.

1.2 The paranormal

At this juncture, by ”paranormal” or ”supernatural” phenomenon is provisionally meant a supposed occurrence that is beyond the scope of current scientific knowledge. On the other hand, when speaking about ”the paranormal”, for example, I refer to anything *related* to supernatural phenomena from the first-person perspective.

From the viewpoint of science, the paranormal is still largely ”uncharted territory” (see Tammilehto 1998, 85) even though, for example, to my knowledge the first Finnish studies in this sphere were conducted on superstition and magic as early as in the late 18th century (see Lencqvist 1782; Rosenbom 1789). There has been scholarly research on the supernatural (Martikainen 1996, 92), but it has been scarce (Heikkilä 1998, 50; Lähteensuo 1998, 3, 6), especially in Finland and in information studies. It would be fair to say that this state of affairs is a result of the academic community’s neglect of the postulated phenomena (see Wooffitt 1992, 4): the scientific community is aware of supernatural issues, but most scholars either belittle them, or they lack the courage to take a look what is out there. In my view, the primary reason for this is the fact that scientific research has been unable to discover decisive evidence for the existence or nonexistence of supernatural events (see Farrington 1997, 6). Some of the latest research (see the journals at http://koti.mbnet.fi/~paranet/kirjallisuutta.htm) on extra-sensory perception (ESP), psychokinesis (PK) and other paranormal capabilities seems to support the existence of phenomena and realities that have up to now escaped the unsophisticated methods of science (see Cherniak 1986, 10; Väyrynen 1987, 214), whereas other investigations do not corroborate this view. Owing to the phenomenological approach and the as-yet disputed nature of paranormal phenomena (see Lehmann & Myers 1989, 378), *the current study does not take any stand whatsoever on their existence.*

The paranormal has been investigated in many branches of science — at least in anthropology, communication studies, medicine, philosophy, physics, psychology, religious science, and sociology. Even whole new disciplines have been formed to research the paranormal, namely parapsychology (Alcock 1981, 3), paranormology (*Institut* … 2001), noetics (Harman 1978), orgonomy (DeMeo 1998), as well as conscientiology and projectiology (*Science* … 2001). The examination has variously concentrated on one or more of the following dimensions of the supernatural: phenomena, experiences, information, beliefs and conceptions, practices, culture, and research itself (meta-analysis). Raymond Eve (in Koukku 1995, 2) states that there are plenty of studies on people’s views on paranormal phenomena, but the problem with

most of them is that instead of trying to understand these notions, they attempt to strip away opinions which appear absurd from the perspective of science. This may, as a matter of course, be one of the worst mistakes that science can possibly make. Thus, there is a demand for research that truly aims at attaining a deeper comprehension of how the supernatural is perceived and interpreted.

It definitely seems to be the case that during the last decade, the scientific investigation into the realm of the supernatural has proliferated tremendously. This is indicated by the large number of scholarly organizations (see http://koti.mbnet.fi/~paranet/organisaatioita.htm) and publications (see http://koti.mbnet.fi/~paranet/kirjallisuutta.htm) devoted to this area, most of which were established in the 1990's. The observation is grounded upon my continual seeking and monitoring (since 1999) of their World Wide Web homepages. Right now, however, it can be maintained that the scientific study of the paranormal is still very much in its infancy (Mikkonen 1998, 4).

There is no question about the fact that the belief in paranormal or supernatural phenomena is at least as ancient as our documented history (see Gordon 1996, 4; Shermer 1997, 275). In spite of the incredible advances made in science, that faith — while having gone through numerous changes — is still alive and well (see Farrington 1997, 6; cf. Keranto 1996, 11). Some authors (like Shermer 1997, 275) think that the commonness of positive convictions about the paranormal has remained more or less stable over the millennia. Other scholars (for instance, Lindeman 1998, 257) agree in that the popularity of the supernatural has not declined. There are even researchers who maintain that during the last few decades, interest and belief in paranormal phenomena has actually grown to a substantial degree (see Heino 1997, 36, 358; Nisbet 1998; cf. ibid.). Today, credence in the supernatural is remarkably common (Epstein 1994, 712; Parsons 1992; *Science* … 2000, ch. 8; Shermer 1997, xvii, 15) — perhaps even more so than ever before (Griffon 1991, 6). The figures on the share of believers in the paranormal vary — depending on the phenomena inquired about and the wording of the questions, for example — but on the basis of a number of surveys, it can be said that about half of the population accepts the existence of supernatural phenomena (see e.g. Blackmore 1990, 62; Marin 1996, 43). In a Gallup study, for instance, the existence of angels was endorsed by 47 per cent, and the power of praying in healing illnesses was subscribed to by 45 per cent of Finns in 1995 and 1996 (Heino 1997, 360).

Paranormal beliefs are universal (Shermer 1997, 275), which suggests that they are very important to the human being (Schumaker 1987, 452). But what makes man subscribe to supernature even in the contemporary, civilized world? Over a hundred possible reasons can be identified in literature. One of these may rise above the rest: people's own inexplicable experiences (see Irwin 1994, 107; King 1991, 8; Sparks *et al.* 1997, 356). Some of the grounds for the fascination with the supernatural are concerned with information, knowledge, or sense-making: the treatment of the paranormal in the mass media (Evans 1973, according to Singer & Benassi 1981, 384), searching for alternative resolutions to questions of life (Keranto 1996, 11; Sundback 1996, 224), and looking for new meaning in an existence of seeming meaninglessness (Ben-Yehuda 1985, 103). Although the centrality of these causes cannot be estimated here with any accuracy, people's seeking alternative answers to the fundamental questions of life (and death) appears to be one of the main incentives to being keen on the paranormal. This notion is elaborated by Gustav Jahoda who in his psychological book on superstition presents an intriguing hypothesis based on a theory of magic by Bronislaw Malinowski: "Where chance and circumstances are not fully controlled by knowledge, man is more likely to resort to magic". (Jahoda 1969, 128.) This conception implies that the hoped-for useful sphere of the supernatural is primarily the Unknown which has so far not been illuminated by the light of science.

One key reason for the contendedly heightened faith in the supernatural could well be the turn of the millennium (see Clarke 1995, x-xi; Gordon 1996, 3): many people who believe in the paranormal also believe that the beginning of this new millennium marks the beginning of a New Age in which mankind would rise to a higher level of consciousness, and in which spiritual values and supernatural experiences would be taken for granted. At this point, though, it is intriguing to bring up Theodor Adorno's

(1994, 128) opposite idea that tending towards occultism (see Table 26 for a definition) would actually be a sign of ”regression in consciousness”. However that may be, one thing is fairly obvious: humanity’s fascination with the paranormal will never die (Frazier 1986, xi), possibly because the supernatural has always been an inseparable aspect of our society (see Ben-Yehuda 1986, 3).

It would strike one as natural, then, that interest and belief in supernatural phenomena would arouse in people a need to know more about them. Little is familiar about how the paranormal is seen as manifesting itself in everyday life, and even less about what it has to do with information action. The title of a leader by Tapani Kuningas[3] — ”Need for information is growing”[4] (Kuningas 1995c, 3) — is a hint pointing to one direction. As far as I know, my master’s thesis (Kari 1996; see also Kari 1998b) was the first scientific study in the world that examines information needs and seeking in the context of the paranormal. Just recently, the second piece of research in this area — Reea Hinkkanen’s (1999) master’s thesis — came out. These studies have merely succeeded in scratching the surface of information searching on the phenomena in question, so there is an obvious demand for further research.

The rest of the current section aims at justifying the selection of the supernatural — instead of some other area of human interest — as a valuable context in which leisure time information seeking should be perused. Both private and public arguments enter into the equation. On the *private* side, the subject matter of the dissertation stemmed from my own, almost 15-year involvement in the paranormal. When I was a teenager, I discovered this ”magical mystery realm” through books. I began my hobby with great fervour, and took up a believing attitude towards information concerning supernature. After doing a lot of reading, however, it gradually dawned on me that there was something wrong with this information: different sources dealing with the same topic occasionally contradicted each other completely. Scientific research on assumed paranormal phenomena was — if possible — even more fundamentally irreconcilable. In the end, I became uncertain of what or who to trust. The inconsistencies in the information connected with paranormal phenomena got me thinking that other people may have similar problems, too. Alleviating these troubles has been an essential force carrying the present research project, although its purpose is by no means to find out the truth behind the information in question.

Public causes are numerous and heterogeneous. I shall principally approach the research object from the vantage point of the human sciences. Quite a few scholars — like Willis Harman (1981, 13) and Gustav Jahoda (1969, 26) — deem paranormality or spirituality (speculated incorporeal qualities; see Table 26 for a precise definition) essential areas of life which ought to be incorporated in the totality of our knowledge system. They need to be analysed scientifically (Bunge 1991, 279). But *why* should paranormal affairs be investigated, then? The needs or benefits may not be immediately obvious, but on a closer inspection, many points seem to justify — and even mandate — research in this domain (cf. Frazier 1986, ix).

First of all, the liberty to enquire into even unbelievable ideas is vital for the growth of scientific knowledge (Rhine 1974, 11), for it has often been the case that really novel discoveries have been ”weird” from the viewpoint of the prevailing scientific conceptions (Turunen 1995, 218). Indeed, there have been cases in which former magic has been transformed into scientific fact (Rhine 1974, 11). *Second,* the ”grey” area of science is in fact its most central area, because it holds the possibility for scientific revolutions (Sturrock 1988, 50), or at least for new innovations (Frazier 1986, xii-xiii). Therefore the task of the scholar should by definition be to explore these frontiers of knowledge (Lindqvist 1995, 212; Maslow 1987, 192-193) in order to push those boundaries ever forward. *Third,* it is important to study all the different pictures of reality (Aittola & Pirttilä 1988, 175), lest we take today’s dominant, materialistic world view too much for granted. Research on the supernatural may lead to new insights into how the human mind — among other things — works (Frazier 1986, xi-xii). *Fourth,* we

[3] Tapani Kuningas has been the chief editor of *Ultra* since its beginning in 1975. *Ultra* has been the most widely-read magazine in Finland dealing with the paranormal.

[4] This and all other quotations from sources in other than the English language are translations of my own.

may learn valuable lessons by scrutinizing marginalized populations (such as the devotees of the supernatural; see Farrington 1997, 6) with their ”hidden and silenced” voices (Dervin 1997, 31), although it is not at all clear whether people who are interested in the paranormal in effect represent a minority or the majority. In the final analysis, the most crucial phenomena for critical social research are those which deviate from the presumed order of things (Alasuutari 1989, 110).

Fifth, people appear to be naturally intrigued by disputable matters (Dervin 1989a, 80). Publishing reliable information on the contested supernatural would satisfy folk’s curiosity and perhaps alleviate their cognitive dissonance. *Sixth*, the apparent prevalence of and increase in the belief in paranormal phenomena should be an indication that this province is a worthy object of study. In other words, the supernatural has social significance. *Seventh*, the wide gap that now exists between scientists and paranormalists (see section 3.1 for a definition) demands bridging. These two communities live in two different worlds, without much of mutual ground. *Eighth*, the social and psychological problems that the paranormal has brought with it need to be addressed in research (Toulmin 1986, 19), as well. On top of these are probably troubles having to do with the credibility of information, and mental health. *Ninth*, if we can uncover phenomena of consciousness that have hitherto remained unfamiliar to us, their potential practical applications might be something beyond our wildest dreams.

On the other hand, if the scientific community continues to ignore the paranormal, some unpleasant repercussions could ensue. *First*, we cannot draw any conclusions on this territory (Frazier 1986, xiii), since we do not know about it. *Second*, if scholars do not take up the supernatural on their agenda, lay researchers will — as they already have — and this will result in the dissemination of pseudoscientific knowledge whose reliability can never match that of scientific knowledge (ibid., xii). *Third*, science can be accused of being close-minded (ibid., xiii) if it artificially limits its scope of inquiry, which is of course not at all desirable. *Fourth*, some of the most remarkable discoveries may never be made.

The choice of the supernatural as the specific case of recreational information action could naturally not be made at random, but had to be well-founded. The above reasoning is more than enough to legitimate inquiring into the paranormal in almost any discipline. Of course, the researcher is at liberty to fix on just about any other field of interest which is probably more recent, better-known, more certain, less dependent on belief, less problematical, less spurned by science, less universal, more reflective of mainstream world-views, more conventional, less strange and incredible, less controversial, and less revolutionary than the domain of the supernatural. After all, there must be myriad areas of everyday activity that are still unfamiliar from the angle of information seeking. It is perfectly permissible for the scholar to opt for a socially safer target, but I was not satisfied with aiming low. I have always been fascinated by extreme, alternative life worlds, and the paranormal — more than anything else — is right there on the ”outer limits”.

2 Earlier research

As was noted in the introduction (previous chapter), scholarly empirical research on information action in the setting of the paranormal has been virtually nonexistent, with my own master's thesis entitled *Rajatiedon hankinnan arkipäivää — osa I: Kyselytutkimus rajatiedon harrastajien paranormaaleihin ilmiöihin liittyvistä tiedontarpeista ja tiedonhankinnasta arkielämän tiedonhankinnan viitekehyksessä [Seeking information on the paranormal in everyday life — part I: A survey on needs and seeking of paranormal information in the framework of everyday life information seeking]*[5] (Kari 1996; see also Kari 1998b), and Reea Hinkkanen's (1999) master's thesis called *Esi-isät ja tiedonhankinta: Ennustus sukuma-nyamwezi-yhteisössä Luoteis-Tansaniassa [Ancestors and Information Acquisition: Prediction in the Sukuma-Nyamwezi Community in North-West Tanzania]* being the sole specimens in this area. However, since Hinkkanen's study focuses on prediction only, takes the intermediary's point of view, and is excessively culture-specific, it will not be analysed here. Both in Finland and abroad, there have been some investigations in information and communication studies as well as in folklore and religious science which touch on the subject of paranormality or spirituality from the perspective of information or knowledge. In the order of chronology, these include:

- Leea Virtanen's (1977) monograph *Telepaattiset kokemukset [Telepathic Experiences]*
- Glenn Sparks', Cheri Sparks' and Kirsten Gray's (1995) article entitled *Media Impact on Fright Reactions and Belief in UFOs: The Potential Role of Mental Imagery*
- Jarna Hara's and Carina Qvick's (1996) master's thesis *"Joku raja pitää olla": Aineistonvalinta yleisissä kirjastoissa, esimerkkinä rajatiedon ja seksologian kirjallisuus ["There Must Be a Limit": Document Selection in Public Libraries, Exemplified by Literature on the Paranormal and Sexology]*
- Glenn Sparks', C. Nelson's and Rose Campbell's (1997) article *The Relationship Between Exposure to Televised Messages About Paranormal Phenomena and Paranormal Beliefs*
- Glenn Sparks' and Marianne Pellechia's (1997) article *The Effect of News Stories About UFOs on Readers' UFO Beliefs: The Role of Confirming or Disconfirming Testimony From a Scientist*
- Tarja Heikkilä's (1998) master's thesis *Katsaus rajatieto diskurssioon ja sisäryhmän käsityksiä rajatiedosta [A Review on the Discursion of Paranormal Information and the Inner Circle's Notions of Paranormal Information]*
- A. Neelameghan's (1999) article entitled *Lateral Relations and Links in Multicultural, Multimedia Databases in the Spiritual and Religious Domains: Some Observations.*

Because these studies are not expressly concerned with information seeking, they are only mentioned here in passing. Nevertheless, some appertaining results from these pieces of research will figure in the discussion below. What becomes evident from this list is the fact that paranormal information in general is seemingly just starting to be acknowledged in empirical studies.

2.1 The paranormal and information

Before proceeding to the problem area proper of this dissertation, it might be beneficial to first take a broad survey of the general information environment of the supernatural.

[5] All English titles in square brackets are translations of my own. The original work is usually in Finnish.

Those interested in supernature are apparently of the opinion that not all paranormal information is true, and so the critique aimed at it is partly justified (Heikkilä 1998, 79). This suggests that there may be severe complications with the credibility of supernatural information.

Moshe Zeidner and Benjamin Beit-Hallahmi (1988, 334) bring to our attention a curious aberration involving belief in the supernatural: they maintain that in the main, people's knowledge of "parareligious" faiths grows with age and education, while their actual credence in parareligious phenomena diminishes. The validity of this pattern may be questioned nowadays, however, since this finding dates back to the mid-1970's.

The media are frequently accused by scholars of promoting undue belief in supernature (Sparks *et al.* 1995, 9; Sparks *et al.* 1997, 346, 347, 355), and indeed there is proof of media portrayals of the paranormal affecting audience persuasions (*Science* … 2000, ch. 8; Sparks *et al.* 1997, 356; Sparks & Pellechia 1997, 165). As a matter of fact, the mass media may well be the single most influential party that molds the public opinion on the supernatural.

It appears that only one study has dealt with the supernatural in libraries. This is a master's thesis from 1996 by Jarna Hara and Carina Qvick that examines librarians' selection of literature on the paranormal and sexology. The interview research incorporates some engrossing findings. Generally speaking, librarians deemed paranormality a delicate issue (Hara & Qvick 1996, 148). Supernatural information was felt to be a problematic field, because the supply was ample and the quality of documents varied greatly (ibid., 103, 148-149; cf. ibid., 148). As a rule, literature produced by big publishers was reckoned as more trustworthy than that printed by small publishing houses (ibid., 103). None of the 25 librarians who participated in the study admitted being personally preoccupied with the supernatural (ibid., 148). Although they did not consider paranormal information as useful, they did not want to limit its acquisition, either (ibid., 104). In this regard, the size of the library appeared to matter: small libraries had a much more negative attitude to material of this kind, which was reflected in the relatively smaller share of acquisitions in the area of supernature (ibid., 135, 151).

Some informants thought that paranormal information was of no present interest, because the societal atmosphere has become more tolerant, and therefore the fashionable air of the paranormal has lessened (ibid., 101). On the other hand, there were also participants who regarded the paranormal as an extremely current topic the interest in which has considerably augmented in recent years (ibid., 102). This latter view was supported by the perception that the demand for paranormal information (especially in books) has been on the constant rise in all but the smallest libraries (ibid., 103, 148). The popularity of books on supernature was seen as the foremost motive for acquiring more such literature in libraries (ibid., 104, 148). These findings may be condensed into one single statement: there is an apparent contradiction between the librarians' and their clients' view on the necessity of paranormal information in libraries.

2.2 Obtaining paranormal information

Paranormal information is provided via an ever-increasing multitude of sources — including books, magazines, newspapers, radio, television, Internet, clairvoyants, fortune-tellers, and mediums. These can be located through libraries, book shops, newsstands, publishers, and information services, to name just a few providers. The carriers of information can be either conventional (e.g. newspapers), or entirely devoted to supernatural information (e.g. clairvoyants). Other, more esoteric information sources for New Agers comprise intuition and spiritual beings (Mikkonen 1998, 2). All over the world, horoscopes as well as books, television programmes and motion pictures on the supernatural "have become an integral part of everyday life" (Ben-Yehuda 1985, 74-75). In spite of the abundance of supernatural information, Tarja Heikkilä's (1998, 79) treatise revealed that some people find it hard to get hold of information on the paranormal, because there are parties involved who want to prevent information of this

kind from spreading.

Leea Virtanen's (1977, 314) study on telepathic experiences indicates that paranormal occurrences are perceived more commonly when conventional channels of information are hindered or cut off. Based on several empirical investigations, Daryl Bem and Charles Honorton theorize that paranormal methods of information acquisition (ESP) are grounded on a weak signal that is normally concealed by sensory "noise". When the input coming through the physical senses is impaired, the actor has a better chance of detecting this type of paranormal information. (Bem & Honorton 1994, 5.) These notions seem to communicate that supernatural means of information obtainment would somehow complement normal (sensory) methods.

2.3 *Seeking information on the paranormal in everyday life — part I*

My own master's thesis (Kari 1996) was the first scholarly study focusing on information seeking and the supernatural. Since it was a kind of preparatory inspection, it is synopsized here in order to furnish context for the results of the present dissertation. The subject of that piece of research was information seeking about the paranormal in everyday life by devotees of supernature — both at work and in leisure time. The central concepts were information/knowledge, information needs, information seeking, information use, paranormal phenomena, and paranormal information. The theoretical framework rested on Reijo Savolainen's (1993a; 1995b) model of everyday life information seeking (ELIS) which consists of the *way of life*, *mastery of life,* and factors affecting these. The model was complemented by Patrick Wilson's (1977) theory of interest and concern. The study had six objectives: its purpose was to find out 1) what kind of a background people interested in paranormality have, 2) what seeking of supernatural information is like in general (i.e. not situationally), 3) how the person's motive (interest/concern) influences seeking paranormal information, 4) how the style of mastery of life impacts seeking information on the supernatural, 5) how the way of life affects information seeking, and 6) how some factors influencing the way of life guide the seeking of paranormal information. The target group were the Finnish devotees of the paranormal, or the members of the paranormalists' community. The research approach was quantitative, and the method of data collection used was survey. A total of 399 questionnaires were analysed.

The results were plentiful. The background of the informants was quite similar to that of Finns at large. The greatest differences were the female dominance of the community, high level of education, and small income. Paranormal information was usually needed in free time, and it was more often searched in a natural rather than in a reportedly supernatural situation. The motive for seeking paranormal information was more frequently interest than problem solving, and on the other hand, more often a spiritual rather than a mundane need. Of information sources, formal and informal ones were equally important, and of information channels as a whole, supposedly paranormal ones were more salient than normal ones. Of information source types, normal self sources, paranormal self sources, and supernatural beings were most esteemed, and of information provider (see "roles" in section 6.3 for a definition) types, supernatural beings were most respected. The three most significant single sources of paranormal information were books, own thinking, and friends. The three most notable providers were friends, experts of the paranormal, and spirits. On the average, supernatural information was sought twice a week, and the principal criterion directing information seeking was the reliability of information. The respondents were willing to go to rather much trouble in order to get paranormal information, but outsiders' help was not resorted to very easily. Pursuing paranormal information was not felt stressful, but commonly mere half of the desired information was obtained. No great barriers to information seeking about the paranormal were perceived.

The motive (interest/concern) was one of the core factors in searching for paranormal information. It impacted the choice of information channels, the activity of information seeking, and the readiness to take pains with getting information. The style of mastery of life of the biggest subgroup of the devotees to the supernatural was pessimistic-

cognitive, and of the smallest groups, defensive- and pessimistic-affective. The style of mastery of life was influential with the degree to which paranormal information was needed at work or outside work. It was also connected with selecting the various channels of information, efforts, depending on outside help, as well as the activity of, stressfulness of, success of, and experiencing barriers to information seeking. The two dimensions of the style of mastery of life — optimism/pessimism and cognition/affect — had an effect on all of these aspects of seeking paranormal information, too.

The way of life of the members of the paranormalists' community appeared fairly normal, except for time allocation — that is, they had more leisure time than working hours. Among hobbies, mental ones were more important than physical ones, and pursuits regarded as paranormal were rare when compared with normal ones. The most central sphere of life was family; the second one was free time, and the least important one was work. In searching for paranormal information, allocating one's time was mostly of importance to the extent to which paranormal information was used at work or in spare time. Hobbies were reflected in the activity of information seeking and in the willingness to go out of one's way to look for information. The most important area of the individual's life was not linked to information seeking at all.

Of the factors affecting the way of life of the paranormalists' community, six determinants presumably meaningful to precisely those interested in the supernatural were chosen: 1) the duration of familiarity with the paranormal, 2) the number of acquaintances in the domain of the paranormal, 3) supernatural experiences, 4) belief in the paranormal, 5) the felt importance of paranormal information, and 6) the tenderness of the supernatural as a topic of discussion. The duration of familiarity with the paranormal influenced the degree to which paranormal information was needed at work. It was also related with the motive (interest/concern) for information seeking, the election of information channels, and the activity of information seeking. The number of acquaintances in the sphere of supernature, in its turn, made a difference to the extent to which paranormal information was needed at work. In addition, it impacted the picking of information channels and the success of information seeking. Experiencing paranormal phenomena was connected with the needs for paranormal information arising at work, and the degree to which information was searched for in a supernatural or natural situation in general. Likewise, experiencing the paranormal had an effect on the motive (spiritual/mundane) of information seeking, the choice of information channels, as well as the activity and effort of information seeking. The belief in supernature and the importance of paranormal information was of significance to the degree to which supernatural information was used at work, and to why (interest/concern) paranormal information was conventionally sought. These factors affected the selection of information channels, the activity of information seeking, the readiness to take pains, becoming stressed when searching for information, and perceiving barriers to information seeking, too. Seeing the paranormal as a delicate issue did not manifest itself in information seeking in any way.

The most significant finding of the study was that among those interested in the supernatural, psychic experiences (clairvoyance, dreams, fortune-telling, telepathy) and allegedly paranormal entities (spirits and extraterrestrial beings) were regarded as highly important channels of information, on the average even more so than normal sources (Kari 1996, 103, 144; Kari 1998b, 33-34, 36-37). This tells us something about the aficionados and subculture that are the subject of examination here, as well as about the empirical context of the research at hand. Although the acquired result is not evidence of the existence of paranormal phenomena, it does raise many questions that require an answer.

2.4 An evaluation

The text in this chapter exhibits almost all that is known about information and information action in the generic context of the paranormal. The empirical findings are really not much, but at least they provide us with something to start with. I am well aware of the fact that research on various supposedly supernatural modes of information

obtainment has been conducted in other disciplines like parapsychology and religious science. However, the focus of those studies is typically so specific that there is no point in going through them here, because at this point, we do not as yet know what exactly it is that the results of this investigation will deal with.

It may be concluded that the research-based knowledge on the broad information environment of the supernatural is exceedingly fragmentary. In a similar vein, our understanding of the paranormal in information action is proportionately gappy, for hardly anything can be said about situations, information needs, information, and information outcomes in this area. What is more, the findings of my master's thesis (Kari 1996) are but preliminary indicators, since most of the measures in that study were previously untested. Therefore, it might be appropriate to say that there have been some investigations on paranormality and information, but at the present time, the picture conveyed by them is so incomplete that nothing like a sound theory can be formulated on their foundation. In the analysis of information seeking involving the supernatural, one may discern a great need for a holistic approach that would acknowledge the whole variety of the paranormal and the entire process of information action. The current study is partly an attempt at filling this void.

3 Theoretical framework

As the subject of information action in the context of the paranormal is still all but unexplored, I was largely left to my own devices as to how to conceptualize it. The research problem demanded specification, and the best way to do this was to use theory. At the metatheoretical (discipline-independent) level, the study at hand has to some extent been informed by the thought formations of phenomenology, constructivism and social constructivism, as well as sociology of knowledge, but the main contributor is Brenda Dervin's (see e.g. 1983b, 1992, 1999b) theory of Sense-Making. This last one is of direct consequence to my theoretical framework, so it will be explicated in a section of its own (3.2). In so doing, Sense-Making will not first be presented in its virginal form — as a brainchild of Dervin's — and then be elaborated with other scholars' input. Instead, an idea-centric approach (which actually runs through the whole dissertation) will be adopted, so that a common ground will be covered, seasoned with useful specifications and extensions from others. This will be quite necessary in fact, because Dervin's own work remains highly abstract and even somewhat obscure. Also, it is not my primary design here to analyze and advance the Sense-Making methodology itself, but rather to provide a wider frame of reference for information action. Even so, some suggestions as to how Sense-Making could be further developed are presented in chapters 6 through 8. The other metatheories mentioned above operate implicitly in the background, and thus will not be discussed.

The theoretical framework proper that I am attempting to develop here is a general model of information action as a process. This framework will be specified to accommodate the context of this investigation — interest in the paranormal. Finally, research questions grounded on the model will be posited. Such a step-by-step exposition is performed not only due to the theoretical aspirations of the thesis, but also because information seeking research has been amateurish at particularizing metatheories into substantive theories (Vakkari 1997, 451). All of this explication is preceded, however, by the definitions of the fundamental concepts that are vital for understanding the whole study. It is worth mentioning that unless stated otherwise, all concepts explained in this work have been defined more or less differently by different authors in the past. The definitions here have been deliberately formulated to reflect the design of this piece of research, and thus may not always represent mainstream conceptions. Furthermore, it ought to be noted that practically all concepts are defined from the actor's point of view.

A word about the special nature of paranormal phenomena and information is in order. The ontological and epistemological contradictions between supernatural and scientific pictures of the world occasion problems to the study of paranormal information. Paranormalists and scientists namely disagree on what exists and how knowledge can be acquired about that which exists. Under these circumstances, I do not think that the researcher has the right to say what is true and what is not, especially when it is a matter of such delicacy. One way out which contents both parties is to respect the paranormal by acknowledging it on the plane of theory. I shall resort to this means in my study by including concepts and categories by those keen on the supernatural in the frame of reference that is being constructed here. So when the model and empirical results are discussed, it must be remembered that the concepts are merely tools in analysing people's reality. In themselves, the concepts do not necessarily tell us anything about the actual existence of their referent. Instead, they may reflect the way in which people believe in or experience so-called paranormal phenomena.

3.1 Basic concepts

Information

On the basis of the conceptual analysis presented in my master's thesis, information can be defined as a linguistic and meaningful representation which depicts some part of the perceived reality, and is outside the individual's awareness (Kari 1996, 16; see Chen & Hernon 1982, 5; Cook & Brown 1999, 387; Derr 1985, 490, 491; Farradane 1980, 77; Fogl 1979, 21; Kando 1994, 22; Scarrott 1994, 89; cf. Buckland 1991b, 356; Cleveland 1983, 7). Information has the ability to inform people with its content (Bruce 1997, 322; Buckland 1991b, 351; Derr 1985, 493, 494; Ritchie 1991, 413; Zhang 1988, 480; cf. Ford 1977, 2) — it could even be said that information *is* the semantic content of a message (Wilson 1977, 40; cf. Ford 1977, 2). Information always has a carrier — an entity, phenomenon or process — which is capable of mediating messages in communication (Niiniluoto 1989, 23).

Information can be old or new to the individual (Allén & Selander 1985, 25), but usually it is part known, part unknown at once (Cole 1994, 473). A fundamental peculiarity of information has many times been deemed its capability to reduce uncertainty (see Balnaves 1993, 100; Krikelas 1983, 6; Ritchie 1991, 417). Michael Buckland (1991b, 351), however, sees this as a special instance, for sometimes information actually *increases* uncertainty (see also Halloran 1983, 160; Kunz *et al.* 1977, 64).

There is no guarantee that information is in concordance with intersubjective knowledge, with what is known by society (Wilson 1977, 82). Information does not need to be true or truthful (Derr 1985, 496; cf. Hintikka 1993, 2), either, because often ”man is not looking for the truth, but for a solution to his problems” (Raivio 1995, 3). Seeking the truth is, of course, an altogether different matter. Everyone needs (Heikkilä & Holma 1990, 52) and strives to seek information because it is useful (Turunen *et al.* 1994, 52). Hence, information is an intrinsic part of life (Solomon 1997c, 1137).

Knowledge

Individual, subjective knowledge[6] is a mental construct which has been formed out of information (or observations) via sense-making, and is within the actor's consciousness (Kari 1996, 21; see Bonitz 1990, 6; Bruce 1997, 322; Buckland 1991b, 351; Derr 1985, 493; Dervin *et al.* 1982, 425; Kando 1994, 21, 22-23; King & Palmour 1981, 68; cf. Johnson 1996, 7). In more colloquial terms, knowledge is something that the person has in mind and understands. Like information, knowledge needs not be true (Niiniluoto 1986, 73; Turunen 1989, 111; cf. Laaksovirta 1986, 56; Paasilinna 1986, 175; Turunen 1983, 36; Turunen 1989, 110, 114). Neither is the knower required to believe in the truthfulness of his knowledge (cf. Niinikangas 1985, 1; Tamminen 1993, 35).

When subjective knowledge is communicated, it once again becomes embodied in information (Bonitz 1990, 6; Buckland 1991b, 351, 352; Fogl 1979, 21; Wilson 1977, 40). Although it is relatively easy to separate information and knowledge from each other analytically, it is not so in the empirical world (see Savolainen 1994, 103). Therefore, because the term ”information” is by far the more established one in information studies, I shall conventionally utilize it in this work to refer to both information and knowledge for the sake of simplicity. What is more, when talking about information seeking or action, it is generally assumed that this activity involves ”translating” information into knowledge. Thus the term ”knowledge” will be reserved for those occasions only which do not directly concern information.

[6] Some authors actually employ the term ”information”, although they obviously refer to knowledge as defined here.

Process

The term ”process” is derived from the Latin word *procedere* that means ”going forward, succeeding, getting far” (Venkula 1988, 8, 10). According to Aristotle (see ibid., 8), process can in very generic terms be viewed as a slowly and gradually changing condition. Jaana Venkula (ibid., 9, 10) more precisely defines process as ”a series of acts and events” during which a change can be detected and which usually has a purpose. One central characteristic of process is its dynamic nature, because goal-oriented action strives for transformation and proceeds in time (see Perttula 1994, 41; Puddifoot 2000, 81; Venkula 1988, 9; Wiio 1996, 31). Process may, however, be either linear or — more often — non-linear (see Dervin 1997, 19). Yet, the dominant idea of process is that of a linear course in social research (Puddifoot 2000, 82).

The process always has its beginning and end (Schutz & Luckmann 1989, 49, 53). In this respect, Suvi Perttula proposes:

> ”The process starts at the moment which activates purposeful action. […] The process stops when the intention or objectives of the process have been sufficiently attained, in other words when the aspiration that set off the process passivates for one reason or another. […] Between the beginning and end of the process remains a sequence of activities that have a chronological order.”
>
> *(Perttula 1994, 40)*

Sometimes, however, the process ends up in an unanticipated result (Mindell 1985, 11).

A process of action consists of subprocesses (Venkula 1988, 9; see also Whitehead 1978, 211) that may be called ”acts” (Perttula 1994, 40; Venkula 1988, 9, 10; cf. Schutz & Luckmann 1989, 14), ”steps” (ibid., 53), ”stages”, ”phases” (ibid.), or even ”states” (Mindell 1985, 11-12). In unity, these parts constitute a novel whole (Whitehead 1978, 211). The actor is much less (if at all) conscious of early than later stages in the process (Venkula 1988, 9). Each phase of the process automatically lays a foundation for and influences the next one and all others following it (ibid., 10; see also Whitehead 1978, 215).

The notion of *dynamic process* as a flow of events can be contrasted with the more primitive conception of *static state* as a fixed picture of a situation. If a condition seems unchanging, this is just a special case of process. (Mindell 1985, 11, 12.) As a matter of fact, it may be argued that everything in existence is in a state of process — some processes of becoming are just so slow or subtle that transformations are hard to see. As Dervin (1991, 62) puts it, ”there is no static order in the universe”.

Paranormal phenomenon

Literally speaking, ”paranormal” means something that is ”beside” or ”beyond” normal experience (Kurtz 1985, 503; cf. Varto 1995, 112). However, probably the most typical way to demarcate *paranormal* or *supernatural phenomenon* is to regard it as a hypothetical phenomenon[7] which contradicts the scientific laws that are taken for laws of nature — or, more generally — the most fundamental suppositions and principles of science — or, most generally — today’s scientific conception of the world (see Alcock 1981, 3; Alcock 1991, 151; Collins & Pinch 1979, 238; Kurtz 1985, 504), on the one hand, and the expectations of common sense and our everyday experiences (Gordon 1992, 2; Kurtz 1985, 504; Schumaker 1987, 451; Tobacyk & Milford 1983, 1029), on the other hand. To this definition I would add that many of the reputed paranormal phenomena also appear to presuppose the existence of one or more parallel and/or spiritual realities. Science is unable to explain such events within current concepts, theories, or laws (Kurtz 1985, 505; Kurtz 1986, 361; Schumaker 1987, 451; Tobacyk & Milford 1983, 1029). Paranormal phenomena can only be explained if great changes are

[7] ”Hypothetical phenomenon” signifies the fact that when talking about paranormal phenomena, it is presumed or claimed that they in fact exist. Therefore the definition for paranormal phenomenon assumes that an occurrence of this kind may be possible at least *in principle*. The definition does not — nor does it have to — take a position on whether these alleged phenomena *really* exist or not.

made in science (Kivinen 1989, 47). Prime exemplars of the phenomena are UFOs, spirits, and telepathy. The proponents of paranormality maintain that there are dozens if not hundreds of different supernatural phenomena in existence.

It must be noted, however, that what is held paranormal is not immutable. From the perspective of science, phenomena can only be called ”paranormal” in relation to theories whose phenomena are assumed to be ”normal” (Toulmin 1986, 16). Also, ideas of paranormality vary from one culture to another. For instance, reincarnation is regarded as a paranormal phenomenon by westerners, whereas in India, it is a perfectly normal occurrence. (Gordon 1992, 3.) Another point to remember is that supernatural phenomena only represent one slice of the great Unknown of science (Björkhem 1939, 11).

I use the words ”paranormal” and ”supernatural” interchangeably, since their meanings are virtually identical in ordinary language (cf. Gordon 1996, 9). When alluding to anything associated with putative paranormal phenomena — including experiences, mentation, action, and so on thereof — *the paranormal* or *the supernatural* would be the preferred broader term. In other words, this particular abstraction does not talk about supernature as phenomena alone, but as a sphere or subject matter of human activities in general (see *Collins* … 1987, 1041). A *paranormalist* or *supernaturalist*, in his turn, is an individual who not only is interested, but also believes in paranormal phenomena (see ”-ist” in ibid., 775). One must guard against identifying beliefs with interests, for a personage can be keen on supernatural matters without necessarily having faith in them (see Adler 1998), or the other way around.

Concepts related to paranormal or supernatural phenomena include *esoteria*, *magic*, *mystique*, *New Age*, *occultism*[8], *pseudoscience*, *religion*[9], *spirituality*[10], and *superstition*. While paranormality is an ontological construct, all the other, associated concepts are abstractions that exhibit a certain epistemological or practical perspective on supernature — possibly excepting spirituality which is rather a facet of paranormality.

Paranormal information

I call information pertaining to paranormal phenomena *paranormal information* (cf. Hara & Qvick 1996, 5; Heikkilä 1998, 74; Varto 1995, 112-113; Väyrynen 1987, 214). It would seem that explicating this notion is as easy as that. Wrong: the concept of paranormal information, despite its innocent appearance, is in actual fact an extremely complex one. I will not go into all the welter of detail here, but I do wish to raise a couple of things to demonstrate the point. First of all, the relationship between this information and supernatural phenomena can take three forms. Paranormal information may be *about* the paranormal (Weisen 1990, 20), may supposedly have been acquired by supernatural *means* (Heikkilä 1998, 74; Thalbourne & Delin 1994, 24), and/or may be considered as originating with a paranormal *source* (see Varto & Veenkivi 1998, 24). Therefore, only in the midmost case is information in itself judged to be a supernatural occurrence. This distinction will become a valid and obvious insight in the course of the study. One had better use the efficient expression ”paranormal information” when none of the three facets of information associated with the supernatural is discussed in particular.

The term ”paranormal information” is my own translation of its approximate Finnish equivalent ”rajatieto”[11] which literally means ”boundary information / knowledge”. This ”rajatieto” is a Finnish concept that was coined 25 years ago in 1975, when the publisher of *Ultra* (nowadays the leading magazine on the paranormal in Finland) was established (Kuningas 1995a, 3; Kuningas 1995b, 8; Kuningas 1996, 3). During the last seven years which I have spent researching information seeking linked to the paranormal as a hobby, I have never encountered the concept in question in

[8] See Table 26 for a definition.

[9] See Table 26 for a definition.

[10] See Table 26 for a definition.

[11] As an exception, Juha Varto (1995, 112-113) speaks of ”paranormaali tieto” which is an accurate rendering of ”paranormal information”.

foreign literature, at least not in English or Swedish language. Frankly, this state of affairs is somewhat bizarre. There is one concept that is related to paranormal information: it is called *esoteric*, *mystical* (Varto 1995, 111), or *spiritual* (Laurila & Joutsimäki 1999, 48, 51-52) *knowledge*. This abstraction has a much narrower import than ”paranormal information”, however: ”esoteric knowledge” exclusively refers to lore that has presumably been obtained through spiritual senses (ibid., 50-52; cf. Varto 1995, 111). Thus, this concept is useless for the purposes of the current study. It is obviously a better choice to use a concept which is more general in its meaning, and simultaneously to the point.

Some of the difficulties in defining paranormal information stem from the fact that in Finnish, the word ”tieto” stands for two things. It signifies both information and knowledge. Therefore, the word ”rajatieto” can similarly be interpreted as either a piece of *information* involving supernatural phenomena, or a domain of *knowledge* — the sum total of what is known about the paranormal by a particular person or community. In this dissertation, I must limit the treatment of ”rajatieto” to its aspect of information. Taking the knowledge side of ”rajatieto” along would require the explication of the concept’s complicated relationship with scientific knowledge and everyday knowledge, which task I am not willing to undertake here.

Suffice it to say that if scientific knowledge is acquired through the ”golden mean” of following given principles, then paranormal knowledge is obtained via extreme information seeking heedless of such contrived regulations (Heikkilä 1998, 58). This logically entails that scholars and paranormalists have a markedly different idea of what constitutes information or knowledge (Laurila & Joutsimäki 1999, 49). As with supernatural phenomena, supernatural information is also bound up with culture: in India, for example, occult fields of knowledge have the same status as scientific disciplines — unlike in ”enlightened” Western countries (Luoma 1994, 206).

Supernatural information does not carry the burden of everydayness nor the greyness of life with it (as normal information often does), but instead it seems to emanate from another plane of existence and thus to allow us to catch a glimpse of the ”true” meaning of life (Kannisto 1978, 10-11). This appears to be the hallmark of paranormal — and especially spiritual — information. Indeed, there is empirical proof of the pursuit of the supernatural fulfilling man’s need to withdraw from the day-to-day routine (Keranto 1996, 11). On the other hand, there are signs of paranormal information being usually acquired in the ”ordinary” contexts of everyday life, as the current study will demonstrate.

3.2 Sense-Making

Since its very birth in 1972, Sense-Making has been a creation of Brenda Dervin’s (and her colleagues), an American communication researcher (Dervin 1989a, 76; Dervin 1992, 61; Dervin 1998; Dervin & Clark 1999). In developing the theory, the purpose was initially to provide alternative approaches to studying information seeking and information systems communicatively (Dervin 1992, 61; Dervin 1999b, 728-729). However, Sense-Making research has been conducted not only in information studies, but in many other disciplines, as well (Tuominen 1992a, 33), the most noteworthy of which are communication studies and education (Dervin 1998). By 1992, over 40 empirical Sense-Making studies had been done among various populations, in a multitude of different situations, and containing a copious array of communication systems interacted with (Dervin 1992, 80). A fair indication of this dispersion is exhibited by the recent assortments of working papers published in a book — *Methodology Between the Cracks: Sense-Making as Exemplar* (1999) — and refereed articles in a thematic issue of *Electronic Journal of Communication* (1999, vol. 9, no. 2-4; see http://www.cios.org/www/ejc/v9n23499.htm) dedicated to Sense-Making research. At first (in the 1970’s and 1980’s), the Sense-Making framework was something of a counter-cultural phenomenon, but in the 1990’s, Reijo Savolainen (1993b, 26) observed that it was becoming a mainstream research approach. Now at the turn of the millennium, Sense-Making does not yet seem to have quite broken through.

The wide applicability of Sense-Making follows from the interdisciplinary nature of the theory (see Savolainen 1992, 159): it has elements at least from communication research, cognitive science, information studies, and sociology (Savolainen 1993b, 26). Sense-Making is, however, most firmly rooted in the field of communication studies (ibid., 15; Tuominen 1992a, 33). The philosophical foundation of the theory has been constructivism (Savolainen 1993b, 16), but it has of late extended its basis to become a ”methodology between the cracks” that separate different paradigms (see *Methodology* … 1999).

To the concept of *Sense-Making*, many meanings have been attached. It has been used to refer to a set of assumptions and assertions, to a theory, to a methodology, to a set of methods, and to a body of research results. In the broadest sense of the word, Sense-Making is all of this. More than anything else, however, Sense-Making is ”a set of metatheoretic assumptions and propositions about the nature of information, the nature of human use of information, and the nature of human communication”. On the other hand, the term ”Sense-Making” essentially alludes to ”a coherent set of theoretically derived methods for studying human sense-making”. (Dervin 1992, 61-62; see also Dervin 1989a, 77; Dervin 1999b, 729, 735; Dervin & Clark 1999; Savolainen 1992, 153; Wilson 1999b, 257.) Savolainen (1992, 159, 160) even suggests that Sense-Making is a research paradigm of its own, at least in information studies. For the present purposes, however, Sense-Making can be reckoned as a metatheory that provides methodological guidance for building substantive theories and carrying out research (Dervin 1999b, 729, 737, 748; Dervin & Clark 1999).

At its broadest, the phenomenon of *sense-making* means internal or external ”behaviour … which allows the individual to construct and design his/her movement through time-space” (Dervin 1983b, 3). In particular, sense-making is action in which the person creates meaningful structures of sense that enable him to continue his movement through time and space that has halted for some reason (Waldron & Dervin 1988, according to Tuominen 1994, 65; cf. Dervin 1998; Schamber 2000, 734). These definitions do not, however, really allow us to grasp the concrete meaning of sense-making. A dictionary offers a sensible explanation: ”When you make sense of something, you succeed in understanding it” (*Collins* … 1987, 1316). Thus simply speaking, ”sense-making” imports getting a comprehension of or attributing meanings to something. Hence, this activity can also be called ”meaning-making”, like Suzanne Iacono (1996), for instance, does.

The aim of Sense-Making research is to understand how people make (and unmake; see Dervin & Frenette 2000) sense of their world (Dervin 1992, 61, 62, 67; Dervin 1998; Dervin 1999b, 736), and, from the perspective of information studies, how information action creates meaning (Solomon 1997c, 1137). Sense-Making is not interested in ”how people are moved by messages but rather how people move to make sense of messages”. The framework ”focuses on how individuals use the observations of others as well as their own observations to construct their pictures of reality and use these pictures to guide behavior”. (Dervin 1983b, 6-7.) According to Dervin, the approach can be used to study any situation which involves communication, in any context. The actor can be any type of entity — individual, group, organization, or even society. (Dervin 1991, 66; Dervin 1992, 68, 70.) Utilizing Sense-Making is a holistic process, since it is employed throughout a piece of research, all the way from formulating research questions to collecting and analysing data (ibid., 70; Dervin 1999b, 737; Dervin & Clark 1999).

The Sense-Making conception is by no means in its final form, for its theory and methodology are still under development (Tuominen 1992a, 33). Even though the approach has undeniable conceptual and empirical merits, Savolainen (1992, 157) is of the opinion that ”perhaps we should not speak of a theory with an axiomatic system of concepts and strongly confirmed empirical results but rather of a research programme with a promising theoretical framework suggesting interesting ideas and hypotheses” (cf. Dervin 1989a, 76; Savolainen 1995b, 261). Probably the most central development in Sense-Making has been its evolution from an approach to examining information seeking into a ”generalized communication-based methodology” for studying sense-making in any milieu (see Dervin 1999b, 728-729). Another major improvement has

been the gradual shift of focus from the individual alone (see e.g. Dervin 1983b) to a more balanced view of the actor and social structures in interaction (see e.g. Dervin 1998; Dervin 1999b; Savolainen 1993b, 25-26; cf. Kumpulainen 1993, 88-89; Savolainen 1995a, 10-11; Tuominen 1992a, 38; Tuominen 1994, 67). A third cardinal advance has been the inclusion of not only cognitive aspects of meaning-making (see e.g. Dervin 1983b), but also affective ones (see e.g. Dervin 1998; Dervin 1999b).

Underlying assumptions

The Sense-Making theory contains several basic suppositions about (human) reality that are often expressed metaphorically (Savolainen 1992, 157; see also Savolainen 1995b, 261) and taken for granted. From the point of view of the current study, the most central ones are: 1) the individual is constantly moving in time-space, 2) human reality is discontinuous, 3) the individual has to make sense of the world to be able to bridge gaps caused by discontinuity, 4) sense-making is dependent on the situation, 5) meaning-making is a process bound to space and time, and 6) information seeking is a part of sense-making.

Moving. At the core of Sense-Making, there is the notion of the individual's constant movement in time-space (Cheuk & Dervin 1999; Dervin 1983b, 7; Dervin 1989a, 77; Dervin 1998; Dervin 1999b, 730, 733, 740; cf. Dervin 1999a, 37). Dervin herself expresses the basic dynamics of the theory at a metaphorical level as follows:

> ”Assume a human being taking steps through experiences: each moment, a new step. The step may be a repetition of past behavior, but it is always theoretically a new step because it occurs at a new moment in time-space. Assume a moment of discontinuity in which step-taking turns from free-flowing journey to stop. Focus on the individual at this moment of discontinuity, this stop which does not permit the individual, in his or her own perception, to move forward without constructing a new or changed sense. Determine how the individual interprets and bridges this moment: what strategy he or she used to define the situation which was the gap; how he or she conceptualized the discontinuity as gap and the bridge across it; how he or she moved tactically to bridge the gap; how he or she proceeded with the journey after crossing the bridge.”
>
> *(Dervin 1992, 68-69; see also Dervin 1991, 66)*

Movement also implies that the human being is perpetually ”evolving and becoming” (Dervin 1998).

Discontinuity. Another fundamental idea in the Sense-Making theory is the premise of discontinuity which is thought to be one of the basic characteristics of reality — especially human reality (Dervin 1989a, 77; Dervin 1991, 62; Dervin 1992, 62; Dervin 1998; Dervin *et al.* 1982, 424, 425; cf. Savolainen 1993b, 16). Discontinuity is represented by some problem faced by the person, or at least discontinuity may engender problems to him (Savolainen 1992, 154; Savolainen 1993b, 17; cf. Dervin & Frenette 2000). According to Sense-Making, discontinuity or gaps exist in all being: between and within entities (living or not), events, messages, structures, times, and places (Dervin 1989a, 77; Dervin 1991, 62; Dervin 1992, 62; Dervin 1999b, 733; Dervin & Frenette 2000). Savolainen (1993b, 16) aptly notes that in Dervin's thinking, continuity seems to be only temporary. Discontinuity raises a need in the actor ”to construct meaning in the absence of complete instruction from the environment” (Dervin *et al.* 1982, 429; see also Dervin 1989a, 77; Dervin *et al.* 1982, 425).

Gap-bridging. Sense-making is related to the discontinuity of reality in such a way that making sense is precisely about building meanings or ”bridges” across discontinuities or gaps through communication (Dervin 1991, 62; Savolainen 1993b, 16; see also Dervin 1989a, 77). It may be said that in this regard, the human being's task is to create continuity (Savolainen 1993b, 16). This gap-bridging can hence be defined as ”the constructive process where an individual draws on cognitive and affective resources in order to cross the gap being faced” (Savolainen 1999a, 78, 80). In this activity, the actor ”engages in behavior: observings, thinkings, idea creatings, comparings, contrastings, rejectings, talkings, sendings, agreeings, disagreeings, and so

on" (Dervin 1991, 62; see also Dervin & Frenette 2000). The raw material for sense-making can be anything from "ideas and cognitions, feelings and emotions, questions and muddles, angst and hunches, dreams and wishes" (Dervin 1998; cf. Dervin & Frenette 2000) to "observations and understandings, […] visions, pretenses and illusions, connections and disconnections" (Dervin 1999b, 730). The means of bridging gaps are indeed profuse (Dervin & Frenette 2000). In one instance, however, Dervin (1991, 67) appears to liken gap-bridging to mere "source-using". An important aspect of sense-making is the actor's desire to comprehend his problems that induce him to seek meanings (Solomon 1997a, 1098). Therefore it may be asserted that meaning-making is an unavoidable method of surviving in life (Dervin 1983b, 14; Dervin 1998; Solomon 1997c, 1136; cf. Dervin *et al.* 1982, 425), which is why it is not astonishing that "all communicating entities […] bridge gaps" (Dervin 1991, 62).

Situationality. The Sense-Making theory places heavy emphasis on context: sense-making is not supposed to be explained by individual differences, such as demographics or character traits, but by contextual factors, such as situation or gap (Dervin 1983b, 6; Dervin 1989b, 226; Dervin 1991, 65; Savolainen 1995b, 261; Talja 1997, 74). The theory presumes that sense-making is situational activity, for meanings hinge on time and place (Dervin 1983b, 7; Dervin 1991, 65; Dervin 1998; Dervin & Frenette 2000), although they "can both transcend time-space and last beyond specific moments in time-space" (Dervin 1999b, 730). Situations change, and with every change, the individual needs to understand his situation anew (Dervin 1989b, 227). Although this situational view has been criticized by some (e.g. Savolainen 1990, 80; Savolainen 1993a, 12; Tuominen 1994, 67) for its solipsism, the perceived context could be anticipated to play a great role especially in difficult situations. Nevertheless, situationality does not connote that sense-making would not involve factors that are relatively independent of time and space (Dervin 1989b, 226; Dervin 1992, 66). For example, people "live in and embody structures" (ibid., 81). These social structures have an impact on what sort of situations the actor comes across (cf. Dervin 1991, 65), and they also restrict sense-making (Dervin 1983b, 8). In spite of this, there is plenty of empirical evidence of situational elements being normally the superior determinants of behaviour (Dervin 1989a, 80; Dervin 1998).

Process. The concentration on the metaphorical movement and gaps coerces us into paying attention "to the possibility of change" (ibid.). Sense-making is not a one-time or persistent phenomenon, but a process in which meaning develops and evolves in time-space. Meaning alters when the world alters. (Solomon 1997b, 1125; see also Savolainen 1999a, 79.) Since meanings are never precise, they are also in a process of continual negotiation (Saari 1998, 116), albeit knowing is not endlessly changeable (Dervin 1999a, 37). Sense-Making may be conscious or unconscious, purposeful or purposeless, and linear or non-linear (Cheuk & Dervin 1999; Dervin 1992, 70; Dervin 1999b, 740; Dervin & Frenette 2000). The process of sense-making is customarily pictured through the metaphor of step-taking:

> "The step metaphor illustrates the chronological procession of action, for the actor is 'imagined' to perpetually take a new step from one context to another. Consecutive steps form a time-line that as a temporally limited series of acts constitutes an operational depiction of the sense-making process."
>
> *(Perttula 1994, 43)*

Information seeking. According to the Sense-Making theory, information seeking or action is a part of "the meaning-making process in life" (ibid.; see also Solomon 1997b, 1125; Solomon 1997c, 1136, 1137). Sense-making "above all seems to be about the process through which the individual makes the problems corresponding to his cognitive gaps clear to himself, and attempts to find valid solutions to them via either his own reasoning and/or external sources of information" (Savolainen 1990, 80). In the Sense-Making theory, knowledge[12] is simply understood as meaning that the individual has constructed at a certain moment in time-space (Dervin 1983b, 5; Dervin 1992, 63;

[12] Dervin actually seems to prefer the word "information", but in order to keep the discussion coherent here, "knowledge" was opted for.

Dervin 1998). Man is assumed to be essentially an active and meaning-making being in whose hands information turns from a ”brick” into ”clay” that he molds and applies in his own personal way (Dervin 1983a, 169). The approach recommends that the scholar withholds from making any a priori judgments about what information ought or ought not to be helpful (Dervin 1999b, 745). However, Sense-Making generally avoids the concept of information, because information can only offer ”a partial and temporally tenuous factizing potential” (ibid., 738; cf. Dervin *et al.* 1982, 424). ”Sense” is something more than just knowledge (Limberg 1998, 39) that has been extracted from information. Yet, information seeking and use are judged to be essential functions in meaning-making (and all communication) (Dervin 1983b, 3; Solomon 1997c, 1136; cf. Cheuk 1999, 24-25; Dervin *et al.* 1982, 425). In the Sense-Making theory, information seeking is not seen as activity of sending and receiving as traditionally, but as a constructive process — ”as personal creating of sense” (Dervin 1983b, 5; see also Kando 1994, 23; Savolainen 1992, 156; Savolainen 1995b, 261). This means that the general motive for information seeking is the need to make sense of some particular matter or the world at large (Wilson 1997, 41).

Situation-gap-use

Sense-Making uses plenty of metaphors. The individual’s movement through time-space is depicted on two planes of abstraction. At the more concrete and metaphorical level, Dervin presents to us a picture of a man walking along a road, when he comes upon an impassable chasm in the ground. In this situation, he is obviously facing a gap. What is he to do now? Well, the poor chap has no alternative but to build a bridge of his own across the gap, which helps him pass over the chasm. Then he can resume his march onwards until he meets with another gap. (see Cheuk & Dervin 1999; Dervin 1989a, 77, 78; Dervin 1992, 68-69.)

At the more abstract and conceptual level, Dervin sees the individual’s movement through time-space as taking steps one at a time. It is these self-defined paces that are of interest to the researcher (Dervin 1991, 66; see also Dervin & Frenette 2000). Each of the steps comprises of three components or phases at which the scholar’s primary attention is targeted: the way in which the actor’s movement ceases (situation), the chasm across which he must erect a bridge in order to keep moving (gap), and the way in which he evaluates his success in gap-bridging (use) (Dervin 1983b, 7; cf. Dervin 1998; Dervin 1999b, 743; Dervin & Frenette 2000; Savolainen 1992, 154-155). These three elements constitute the famous triangle of situation-gap-use (see Figure 1) that illustrates the process of sense-making (Dervin 1983b, 7, 14; Dervin 1992, 68-69; cf. Wilson 1999b, 253, 254). The three concepts form the nucleus of the Sense-Making theory and methodology. They are the basic building blocks for constructing formal and substantive theories (see Cheuk & Dervin 1999), and for designing empirical research. So as to be able to elaborate on the theory, we have to be clear about the meaning of the basic concepts which in this case also represent the various stages of a process.

Situation. At the generic level, Dervin (1983, according to Halpern & Nilan 1988, 170) defines situation as ”an epistemological time-space context that an individual would recognize as being meaningfully separate from other epistemological contexts”. In simpler terms, situation is a point in time and space (Perttula 1994, 43). The Sense-Making theory specifies this definition so that the situation is apprehended as a time-space context in which meanings are formed (Dervin 1983b, 9; Savolainen 1992, 155; cf. Wilson 1999b, 253). When ”routine thinking no longer works effectively” in the situation, the individual’s ”movement is stopped” in a figurative sense (Savolainen 1993b, 17; see also Dervin 1983b, 14). He may have an objective in the situation, but this is not necessary (Dervin 1992, 70). In any case, resolving the situation requires action on the individual’s part (Kumpulainen 1993, 15).

Gap. Dervin (1991, 62-63; 1998) regards gap as the most central concept in Sense-Making, because the gap is where the action takes place in meaning-making (cf. Bruce 1997, 324). The concept of gap means ”an unclear aspect of a situation that a person feels the need to clarify in order to continue movement in a direction that the individual

considers to be constructive or desirable" (Dervin 1983, according to Halpern & Nilan 1988, 170; cf. Savolainen 1992, 155). Gap refers to the same thing as the aforementioned concept of discontinuity (see Dervin 1989a, 77; Dervin 1992, 66; cf. Wilson 1999b, 253). Gap is often more concretely understood as questions that the actor presents in his mind in a given situation (Cheuk & Dervin 1999; Dervin 1983b, 9, 62; Dervin 1989b, 225; Dervin *et al.* 1982, 428; Savolainen 1992, 155; Savolainen 1995b, 261; cf. Dervin *et al*. 1982, 429). In order to traverse the gap, the individual builds a bridge across it (Dervin 1992, 66). Because the gap represents a "cognitive hole" in the person's knowledge (Dervin 1989a, 77; Perttula 1994, 43), the needed bridge is cognitive, too (see Dervin *et al.* 1982, 429). Constructing the bridge is not usually an end in itself for the individual, but rather a means of getting on with the journey towards the destination (Tuominen 1992a, 35; Tuominen 1992b, 114).

Use. Use, on the other hand, stands for "the outcome or outcomes of Sense-Making aimed at addressing gaps" (Dervin 1983, according to Halpern & Nilan 1988, 170; see also Savolainen 1999a, 78, 80). By these "outcomes" is commonly meant how the sense-made information helps or hurts the individual (Dervin 1983b, 9; Savolainen 1992, 155; Savolainen 1999a, 78, 80).

To sum up, the basic dynamics of the sense-making triangle (see Figure 1) are as follows: the situation provides the context in which the person needs to make sense of something (gap), which in turn drives him to seek help (use). Having found this help, the individual is in a new or changed situation. (cf. Tuominen 1996, 13.) However, the model does not promote the idea that "all sense-making […] is purposive or linear" (Cheuk & Dervin 1999).

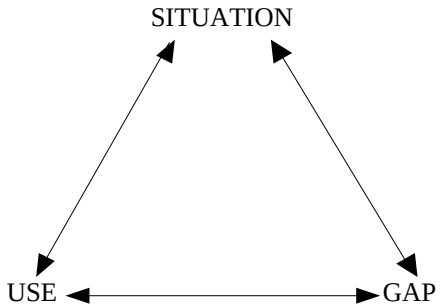

FIGURE 1. Sense-making triangle of situation-gap-use (source: Dervin 1992, 69)

The sense-making triangle (see Figure 1) is, first and foremost, a process model, not a conceptual model. The terms in the triangle stand more for stages of a process rather than for mere states of being or concepts as such. The same pertains to the relationships (depicted by the arrows) between the elements: they primarily indicate the course of the process, not necessarily connections between concepts. Sense-Making states that one round in the process of situation-gap-use incarnates one step in man's life (Perttula 1994, 43), and that each new step is potentially a moment of sense-making (Dervin 1992, 69).

It appears that so far, Sense-Making research (in information studies) has mostly concentrated on specific components of the sense-making process, and thus has not ordinarily scrutinized the whole (Cheuk 1999, 25). My dissertation, however, is mindful of the complete framework presented here.

Choice

Probably the most compelling reason for selecting Sense-Making as the metaframework for this piece of research was its attention to process: the theory aspires to represent the whole process of sense-making, from the arising of a situation to its resolution (cf. Solomon 1997a, 1098; Wilson 1999b, 257). I wanted to study information seeking as a situated process, not as a phenomenon out of context. There were really only two

contestants in this respect: Brenda Dervin's Sense-Making and Carol Kuhlthau's (1991, 1993a, 1993b) theory of information seeking as a process. In the final analysis, I opted for Sense-Making, because it appeared more flexible and general than Kuhlthau's framework. The latter one is in fact a theory of information seeking in the process of *learning* (cf. Kuhlthau, according to Limberg 1998, 58). This process consists of six stages at each of which information searching may take place. I judged the framework too limiting and linear. A more universal and open approach to making sense seemed more pertinent from the point of view of the case at hand, so Sense-Making emerged as the winner.

There are also other features in Sense-Making which made it an agreeable choice. The human being is seen holistically, as an entity consisting of various parts — ”body, mind, heart, soul” — that are inseparably interwoven (Dervin 1998; see also Dervin 1999b, 730; Dervin & Frenette 2000). Moreover, the approach deems all ways of knowing — also those which have been downgraded as utterly subjective — legitimate objects of study (Dervin 1998). Granted, Sense-Making was not exactly a theory of information seeking, but it was close enough. With the years, it has grown into a lofty methodology for studying all communicative practices of which information seeking is just one among others. At any rate, I saw Sense-Making as a grand theory that has potential to explain — by some means or other — all that encompasses information action.

3.3 Information action

Since the Sense-Making approach is a *metatheory* (among other things), it is far too abstract and metaphorical to be directly applicable to information action. As metatheories go, they are not theories that pertain to any single discipline, but rather more general frameworks that provide theoretical substance relevant to many disciplines (see Vakkari & Kuokkanen 1997, 498, 500; Wagner & Berger 1985, 700; cf. Grover & Glazier 1986, 234). They can be used as guidance in building *formal theories* which are more concrete frameworks dealing with phenomena in a particular area of inquiry (discipline; see ibid.). Thus the word ”formal” does not denote here logical formalism as in Pertti Vakkari's and Martti Kuokkanen's (1997) work, but rather the form of a theory than its substance. Metatheories provide the basis and ”spirit” for these derived theories with their both content-wise and structural influence. They also offer certain points of view from which to analyse things. So too is with Sense-Making. When the Sense-Making metatheory is applied in a specific field of research (such as information studies), its theoretical and methodological implementation is peculiar to that discourse (Dervin 1999b, 737). Consequently in this study, information action is seen as a formal (discipline-specific) instance of sense-making (see Bruce 1997, 320).

The sole information seeking theory founded on Sense-Making that I have found to date is David Halpern's and Michael Nilan's (1988, 175) ”cognitive behaviors in information seeking-and-use cycle”. The problem with their model is that it disregards the situation which is a vital component in the Sense-Making theory. That theory is also overly linear and perhaps too metaphorical. So under these circumstances, it may well be worthwhile to ”start from scratch”, and translate the general Sense-Making theory into the language of information studies, so to speak.

A potentially major cause for complications in employing the Sense-Making theory is the fact that it offers no systematic guidelines for constructing theories based on it at lower levels of abstraction than the metatheoretical one. As transpires from the discussion on Sense-Making, the metatheory does say something about information seeking, but this hardly adds up to anything comparable to a theory. However, the metatheory already includes most of the elements that are needed to construct a basic formal theory. They only have to be transformed into a semblance in which the presumptions and concepts match the terminology of information studies.

Besides offering a meaningful foundation to my work, Sense-Making also made it easier to come up with a simple, yet powerful model of the situational process of information action. This is chiefly a derivative of the basic Sense-Making theory

presented above. There are, however, some notable differences. First, the formal theory herein is more concrete and less metaphorical than its paragon. Second, the information action model only involves informational activities, which can be considered as manifestations of sense-making. Hence, the fundamental suppositions of Sense-Making are seen as appertaining to information action, as well. Third, information action is perceived as incorporating not only sense-making, but also action. Fourth, this new model pays more attention to process than Sense-Making.

Information + action = information action

Action can be defined as ”anything that you do in order to deal with or achieve something” (*Collins* … 1987, 14). Action is seen as intentional and hence meaningful (Dant 1991, 201, 203; Wersig & Windel 1985, 18), at least by its performer. A most interesting account of the relationship between information and action is enunciated by Abraham Maslow, one of the greatest psychologists in the 20th century:

> ”Knowledge and action are very closely bound together, all agree. I go much further, and am convinced that knowledge and action are frequently synonymous, even identical in the Socratic fashion. Where we know fully and completely, suitable action follows automatically and reflexly. Choices are then made without conflict and with full spontaneity.”
>
> *(Maslow 1968, 66)*

While the study at hand does not go quite as far as Maslow did in equating knowledge with action, it may nevertheless be asserted that ”knowing” is ”the epistemological dimension of action” (Cook & Brown 1999, 387). Information/knowledge and action are intricately intertwined in several ways. To begin with, genuine action in a most profound manner amplifies our capabilities and habits of seeking and creating knowledge (Venkula 1987, 35; Venkula 1989, 29; Venkula 1993, 80). Moreover, information needs, seeking, and use are generated and determined by the context of action in which they occur (Savolainen 1990, 72; Savolainen 1999b, 86; Venkula 1989, 29; Venkula 1993, 79; Wilson 1977, 44; cf. Ford 1977, 3). Defining an information need presupposes efforts on the individual’s part. The need gives rise to various acts whose function is to satisfy the need (Savolainen 1999b, 85). Information seeking may be viewed as such constructive action, and it can take many different forms (Johnson 1996, 64; Kando 1994, 23; Kuhlthau 1991, 361, 362). Inkeri Heikkilä and Aulikki Holma (1990, 49; see also Venkula 1989, 29; Venkula 1993, 79) impress that ”in knowledge formation, human action is purposive and creative by nature”. When receiving information, for instance, the personage becomes internally active, for he must interpret the message (Krohn 1995, 45). In short, knowledge is essentially gained via action or exertion (Aaltola 1992, 21).

On the other hand, knowledge is used in action (Cook & Brown 1999, 387). One could even say that knowledge enables, begets, or at least helps the individual to act (Dant 1991, 202; Frické 1997, 882; Meadow & Yuan 1997, 710): ”It seems undeniable that information often makes the difference between success and failure in our interactions with the world” (Frické 1997, 882; see also Vakkari 1997, 457). This is because it is difficult to make proper sense of one’s environment of action, let alone to act, without information (Kivinen *et al.* 1994, 11; Savolainen 1999b, 73). Therefore rational action requires information (see Cook & Brown 1999, 387; cf. Wersig 1993, 233). What is more, knowledge may serve appraising the success of already accomplished acts (Savolainen 1993a, 42). From this pragmatical point of view, knowledge is only that which the individual endorses as a personal guideline for action (Venkula 1989, 22; Venkula 1993, 63). In this respect, what matters is whether information is useful or useless, working or non-working (Järvelin 1987, 21). Because in pragmatism, the veracity of information is deduced from its consequences in action (Venkula 1989, 22; Venkula 1993, 64), it is action which is the tester of the adequacy of information (Venkula 1989, 22). A major reason for the lack of success in action are the weaknesses in knowledge (Venkula 1993, 80). All in all then, it can be stated that

information and knowledge are both products and facilitators of action.

When ”information” and ”action” are synthesized, a fruitful fusion is born, carrying the name ”information action”. The expression originates with G. Wersig and G. Windel (1985), who in their article (p. 18; see also Perttula 1994) argue for an action-oriented approach to researching informational phenomena in order to understand the underlying meanings that people attribute to information seeking and its context. Even to date, information action has not been properly defined, but by building upon Sanda Erdelez’s (1997, 412-413) elucidation of ”information behaviour” and Wersig’s and Windel’s (1985, 18) discussion on ”action”, it may be proposed that information action is a process in which the individual performs meaningful deeds in relation to information and knowledge in order to achieve something (cf. Frants & Brush 1988, 86). Because the reason and motive for action is always ahead, some objective customarily gives rise to information action (Perttula 1994, 40). This action is conditional on its context, and is a part of the individual’s other activities and subordinate to these (see Belkin & Vickery 1985, 17; Solomon 1997b, 1125; Sonnenwald & Iivonen 1999, 451; Vakkari 1997, 457; Wersig & Windel 1985, 18)[13].

The person is fundamentally conceptualized as ”actor” or ”action system” in which information action is but one facet of many (ibid.). Action may be rational or deterministic, but it might as well be irrational or capricious. Thus the model does not promote a mechanistic portrait of the human being.

Information action consists of ”information acts” (Dervin & Clark 1993, according to Perttula 1994, 39), encompassing ”understanding and defining information requirements, gathering or selecting data, and processing, editing, organizing, displaying, examining, judging, thinking about, and acting on the information that was gathered” (Solomon 1999, 173-174; see also Höglund & Persson 1987, 3). These activities can eventually be sorted into three broad categories: information needing, seeking, and using (see Vakkari 1997, 460). Hence, information seeking, which has attracted excessive attention in information studies, is only one part of the totality of information action.

Concepts closely related to information action include ”informational activity” (Frants & Brush 1988, 86), ”information process” (Giannini 1998; Talja 1997, 71; Wersig & Windel 1985, 13), and even ”information mosaics” (Solomon 1999) which may sometimes be employed as substitutes. The meaning of information action is somewhat further removed (cf. Wersig & Windel 1985, 18) from that of the traditional ”information behaviour” favoured by some (at least Solomon 1997a-c; Sonnenwald 1999; Sonnenwald & Iivonen 1999; Wilson 1997; Wilson 1999b). The difference is mainly a matter of perspective. ”Behaviour” reminds one of behaviourism, the mechanistic psychological paradigm in which only the person’s outer performance is observed (see Wersig & Windel 1985, 18), and this is utilized as the basis for drawing conclusions of his inner reality (cf. Kuhlthau 1993b, 79). Moreover, ”behaviour” is a term with a kind of passive colour, as if the individual’s functioning solely comprised of reacting to stimuli (see Dant 1991, 203). In addition, ”behaviour” does not convey any sense of intention (see ibid.), advancement, or process. This is probably because ”a person’s behaviour is the way they act in general”, and because ”the behaviour of something is the typical way in which it functions, according to the laws of science” (*Collins* … 1987, 117). Now it is visible that ”behaviour” is not only a positivistic term, but also one which suggests living in constancy and habituation.

All this is quite problematic from the point of view of Sense-Making which presupposes a person moving through time-space, following a will and perceptions of his own. This theory cannot agree that information seeking and use just involve adapting to environmental conditions (Dervin *et al.* 1982, 425), which is implied by the term ”behaviour”. Now I am not claiming that the established concept of information behaviour would in actual fact be as mechanistic as what the word ”behaviour” connotes. I am, however, saying that researchers ought to be careful with selecting the linguistic expression for their referent. In this case, it seems that ”information behaviour” is simply a misplaced term. That is, it is inappropriate to refer to information

[13] Most of these authors in fact talk about ”information behaviour”, but the idea is certainly applicable to information action, too.

needs, seeking, and use by mere ”information behaviour” in our field of study. Since information seeking is commonly regarded as goal-oriented doing, it is much more fitting to gather all dealings with information under the general rubric of ”information action”.

To summarize, the general model of information action introduced here assumes an active and purposeful actor, embraces both internal (e.g. sense-making) and external (physical) acts (cf. Kuhlthau 1991, 363), and looks upon informational activities as constituting a situated, creative process. The protagonist of this process is the doer, but it may also be taken part in by other people. Information behaviour can be treated either as the bodily manifestation of information action, or as a special case of information action in which the individual functions not actively, but reactively or passively. Carrying out an order obediently would be a good example of this. Alternatively, information behaviour may be seen as the pattern of informational activities in general, across time-space.

The model of information action does not mandate any particular research methodology (e.g. action research or Sense-Making) or methods. However, it should be obvious from above that the mere observation of actors is not enough: the investigator must have an access of some kind to the actor’s life world to be able to tap meanings.

Elements

Empirical research has given some of the metaphorical constructs of Sense-Making a more concrete definition (Savolainen 1992, 157). In information studies, it may be postulated that information action is partially founded on the Sense-Making concepts of situation, gap, and use (see Savolainen 1995b, 261). Since the purpose of the study at hand is to explore information action, not sense-making as such, these three concepts have to be translated into the language of information studies. *Situation* is the only one of the main concepts whose meaning and expression remain relatively unchanged when transferred to the formal level. This is owing to the fact that situation is actually a multidisciplinary concept: it does not really have an identity peculiar to information action. ”Gap” is no longer, for the concept basically signifies the same as *information need* in information studies (Dervin 1983b, 9; Savolainen 1992, 155; Savolainen 1995b, 261; cf. Cheuk 1999, 25). Instead of ”use”, we ordinarily speak of ”information use” in our discipline. Savolainen (1999a, 80) remarks, however, that this translation is not unproblematic, since the concepts are not totally compatible (as we shall see below). Therefore it is necessary to introduce a new, broader concept here — namely *information outcome.*

It is also possible to add altogether new main concepts to the model of information action in order to give it more complexity and variation. These additional abstractions would probably be either central elements of information action that are not provided by the Sense-Making theory, or factors that are presumed to interact with information action. The most crucial concept of information action is of course *information seeking* the closest equivalent to which in Sense-Making is likely to be ”gap-bridging” (see Dervin *et al.* 1982, 425). Alas, this construct has so far been poorly expounded. Savolainen (1999a, 78) correctly observes that the theory of Sense-Making is strangely vague about gap-bridging, if compared with use, for instance (see also Tuominen 1994, 70). The metatheory pays far more attention to situation, gap, and use than gap-bridging that logically ought to be the fourth cornerstone of the process of meaning-making. Regardless, the assembling of a cognitive bridge ”brick by brick” can be conceptualized as information seeking (Savolainen 1995b, 261; cf. Audunson 1999, 79; Savolainen 1999a). Information is raw material for sense-making (Dervin 1998; see also Kuhlthau 1991, 361, 362), and knowledge can be conceptualized as a product of sense-making (ibid.), pictured as a bridge standing over a gap (Dervin 1999b, 739).

What is more, I appended another concept to the model, namely *barrier to information seeking*. This is a parameter that has often been lacking in information seeking research, but which could be instrumental in understanding the problems encountered in information action. In other words, studying barriers might have

practical utility. This component has to do with the study's concern with the difficulties which people run into as they seek information. These potential predicaments could be anticipated to become a particularly relevant theme in my research because of the controversial and sensitive nature of paranormal information. Therefore I incorporated barrier into the framework as the fifth main concept.

Situation

Situation is a fundamental concept here (see Sonnenwald 1999, 177), owing to the situation-dependent character of information action (see Bruce 1997, 327; Cheuk & Dervin 1999). For instance, the fruitfulness of information seeking cannot be estimated if the individual's situation is not known (Belkin & Vickery 1985, 12). If we wish to specify the concept of situation for information studies, Dervin's (1983, according to Halpern & Nilan 1988, 170) definition could be rephrased as "an [information action] context that an individual would recognize as being meaningfully separate from other [information action] contexts". Following Sense-Making, we might say that situation is a point in time and space (Perttula 1994, 43) at which the individual seeks information (cf. Dervin 1983b, 9; Savolainen 1992, 155; Sonnenwald 1999, 180). In Sonnenwald's mind, situation may be conceptualized as an attribute of context. In other words, context is something larger than situation. (ibid., 179-180.)

Information need

It is assumed that the desire to know is peculiar to the human being (Johnson 1996, 96; Kurkijärvi 1998, 19). Information need is the individual's conception of what knowledge he requires to clarify "an unclear aspect of a situation" (cf. Dervin 1983, according to Halpern & Nilan 1988, 170; Vickery 1997, 472; Wilson 1977, 64). It deals with something that he does not know (see Byström 1999, 29), so it is oriented towards a quest for the unknown (see Heikkilä & Holma 1990, 43). However, the mere "lack of information" does not constitute a need (Derr 1983, 273; Johnson 1996, 69). The need for information can be apprehended as a question to which the individual has no answer of his own (see King & Palmour 1981, 72; Wilson 1997, 40).

Information need is not a need in itself, but an offspring of another, more basic need (Belkin *et al.* 1982, 63; Itoga 1992, 341; cf. Giannini 1998, 363; Wilson 1981, 8) which is connected to the actor's situation, goal, or destination (see Allen 1997, 111; Byström 1999, 29; cf. ibid., 37). Information need is the circumstance which triggers information seeking (Cheuk & Dervin 1999; Johnson 1996, 69, 144; Wilson 1981, 4; cf. Savolainen 1999b, 80). This need can only be satisfied by information (Kando 1994, 23) that is applicable to the specific "gap".

Information seeking

Information seeking is one of the most essential means of dealing with our daily life (Donohew *et al.* 1978, 31; Savolainen 1999b, 73). In one way or another, the human being acquires information all the time in his waking hours (ibid.). I define information seeking as a purposive process in which the individual attempts to find information through information sources in order to satisfy his information need (see Allen 1997, 121; Byström 1999, 31; Giannini 1998, 364; Johnson 1996, 9; Krikelas 1983, 6; Rouse & Rouse 1984, 131; Wilson 1977, 36, 80; cf. Byström 1999, 31; Kuhlthau 1991, 361). Information seeking focuses on that which is perceived as interesting or useful (Savolainen 1999b, 100; Wilson 1977, 80). If information need is a question, information seeking may be considered as searching for an answer to it (cf. Kuhlthau 1999, 13). Therefore, information seeking probably discontinues when the need has been met (Krikelas 1983, 7). In Savolainen's (1994, 103) opinion, the aim of information seeking is usually to change the actor's conceptions (see also Kuhlthau 1991, 361; Kuhlthau 1999, 15, cf. Kuhlthau 1991, 363). This involves converting information into knowledge, which can only come about through personal understanding (Sarlund 1991, 14). Information seeking is seldom, however, an end in

itself, but rather a means to a ”higher” end (Rouse & Rouse 1984, 129, 135; Savolainen 1990, 72, 82-83; Savolainen 1999b, 86, 106; see also Wilson 1977, 80). This generally means using the knowledge for something (Forem 1973, 107; Saracevic *et al.* 1988, 165; see also Rouse & Rouse 1984, 129, 135; cf. Rich 1997, 12).

In principle, the process of information seeking includes many different stages, from planning a strategy of seeking (cf. Johnson 1996, 144) to interpreting information. So there is an obvious need to divide this highly abstract concept into more manageable and concrete subconcepts before proceeding to the substantive level. Information seeking seems to be comprised of two major components that are simultaneously its targets: information sources that are searched for, and information (and knowledge) that is obtained from these (see Savolainen 1990, 72; Savolainen 1999b, 86; cf. ibid., 85). There are grounds for arguing that it is the content of information that is of primary importance to the information seeker, not its form (Leupolt 1983, 4). Then again, the authority (or another trait) of the source may override semantic priorities in some contexts (such as science).

Information source means a carrier of information from which the individual gets or at least expects to get information that could satisfy his information need (Byström 1999, 47; King & Palmour 1981, 72-73; cf. Johnson 1996, 8, 48-50; Limberg 1998, 20). The person must ordinarily take action if he wishes to locate and interact with the source. *Information*, on the other hand, denotes here the information that the individual acquires from an information source. Information can be viewed as a semantic element of its source (see Johnson 1996, 49, 50). When this information is received (see Rich 1997, 20), it serves as a basis for constructing knowledge. The newly-acquired lore is hereby integrated into ”what is already known” (Kuhlthau 1991, 361). The individual may obtain an answer to his question when he has processed the information.

Information outcome

There has been a lot of confusion in the literature about the meaning of ”information use”. This is manifest in the notion that information use refers to the outcomes of information seeking (cf. Dervin 1983, according to Halpern & Nilan 1988, 170; Havelock 1975, 88), for example. Two major sense clusters of the concept seem to emerge from the muddle, however. On the one hand, information use can be conceptualized as the way in which the gained knowledge is wielded in action (see Byström 1999, 33; Meadow & Yuan 1997, 710; Todd 1999a, 852, 853; Todd 1999b, 11; cf. Ford 1977, 7; Tuominen & Savolainen 1997, 81-82; Ward 1983, 675; Weigel 1983, 121, 122). Information use is thus constructive and functional, because it is oriented to action (Tuominen & Savolainen 1997, 82; see also Savolainen 1999b, 105). Using information is typically conceptualized as a cognitive, internal activity (see e.g. Havelock 1975, 88; Savolainen 1999a, 79; Todd 1999a, 852), albeit some (e.g. ibid., 853; Todd 1999b, 11) also manage to identify its physical side which is seen as ”observable behaviors and actions” (ibid.). Taking this definition into consideration, there are probably very few people who do not use information (see Ford 1977, 2).

Sense-Making, on the other hand, suggests that information use is mirrored by the effects of information, by what the knowledge does for the person and his situation (see Giannini 1998, 364; Rich 1997, 17; cf. Dervin & Frenette 2000). The majority of information seeking research has taken for granted that information is congenitally helpful (Dervin 1999b, 739, 745). Also, according to the so-called ”rationalistic bias” that has prevailed in the literature on knowledge utilization, the consequences of obtaining information are always positive (Rich 1997, 12; see also Johnson 1996, 5). Yet it may rightly be asserted that knowing is not advantageous at all times (Buckland 1991a, 112). It is in fact quite possible for information seeking to have a negative aftermath, as well (Johnson 1996, 5). Sense-Making is aware of this issue, and ”opens up to examination the ways in which information helps” (Dervin 1999b, 745) *or* hurts the actor. The effects of information are frequently deemed alterations which are again cognitive (see Giannini 1998, 364; Todd 1999a, 864; cf. Wilson & Walsh 1995, 29).

At this point, it appears that information seeking may have other consequences besides the mere application of knowledge. It is also evident that ”information use” is

not an appropriate expression to describe the actual effect of information, although these two elements are closely connected. This being the case, a more general concept is proposed — *information outcome.* This can be defined as the consequences of information seeking (cf. Dervin & Frenette 2000; King & Palmour 1981, 73). It embraces both of the above-mentioned aspects of ”use”, that is, use and effect. All in all, it can be concluded that if information need is a question, then information outcome signifies how the obtained answer is put to work by the person and aids him in reaching his goal.

Barrier to information seeking

There are barriers to information seeking that are not easily removed (Johnson 1996, 93; Wilson & Walsh 1995, 3), and which should therefore not be overlooked. Even less research has been carried out on barriers than on use, although restrictions should have a high priority if one wishes to comprehend and resolve problems in information seeking. Impediments have been discussed in information studies only superficially, and the concept itself has in fact never been adequately defined. On the grounds of hints gleaned from the literature, and by resorting to common sense, I demarcate barrier to information seeking as a factor which the individual perceives as hindering or preventing his searching for information. As with everything else in being, hindrances are in part constructed by the person, too (see Maslow 1987, 10).

Process

Process theories and models of information seeking or behaviour are not as rare as it might seem. At least Ragnar Audunson (1999, 74-75), Mary Brown (1991), Katriina Byström (1999, 38), Tula Giannini (1998, 362-364, 366), David Johnson (1996, 59-60, 63, 139, 144-146), Donald King and Vernon Palmour (1981, 71-73), Carol Kuhlthau (1991; 1993a; 1993b), Reijo Savolainen (1993a, 26-27; 1994, 102-103; 1999b, 85), Diane Sonnenwald (1999, 183-184), Diane Sonnenwald and Mirja Iivonen (1999, 434, 451-452), Kimmo Tuominen (1992a, 6), Brian Vickery (1997, 471), Kirsty Williamson (1998, 35-36), Tom Wilson (1997, 47; 1999b, 251-253, 256-257), as well as Tom Wilson and Christina Walsh (1995, 3-4, 35-36) have developed such models of their own. According to Bonnie Cheuk’s (1999, 27) intuition, however, there are not too many models in our discipline which describe ”information seeking as a ’real’ process”, although researchers do have the ambition to depict this activity as a general process (Limberg 1998, 55). The goal of universality has apparently been so pressing that variation in the process has been neglected (Limberg 1999a), which may precisely have resulted in the development of simplistic, ”unreal” process models. None of the above-mentioned models as such qualified for my own piece of research, principally due to their conceptual incongruity, linearity, or partial nature. This study requires a process model of information action which is derived from Sense-Making, is non-linear, and covers the whole process. Therefore a new framework is to be constructed, albeit this is mostly founded upon earlier work.

Information seeking has been considered as a process of cognitive construction (see Dervin *et al.* 1982, 425; Hewins 1990, 156; Kuhlthau 1993a, 345; Kuhlthau 1993b, 5, 52; Kuhlthau 1999, 13, 15; Rouse & Rouse 1984, 130; Savolainen 1995b, 261; cf. Kuhlthau 1991, 362; Yoon & Nilan 1999, 871). For instance, becoming informed is a process (Buckland 1991b, 351; Giannini 1998, 363, 364; Kando 1994, 21, 22-23) in which the actor converts information into knowledge (ibid., 23; Kuhlthau 1999, 13, 15). In many respects, information action is a complex (ibid., 13; Limberg 1999a; Reneker 1993, 488), dynamic (Byström 1999, 39; Cheuk 1999, 23; Johnson 1996, 137; Rouse & Rouse 1984, 135; Yoon & Nilan 1999, 871), and non-linear (Byström 1999, 39; Cheuk 1999, 23) process, just like processes in general. This basically means that the process is iterative rather than one-shot. Since proceeding toward a target is likely to involve some complications, successive searches grounded on feedback may have to be performed. (Wilson 1999b, 267, 268.)

The process of information seeking comprises a sequence of acts or stages (Kuhlthau 1999, 15; Limberg 1998, 20; Perttula 1994, 39). From earlier discussion above, it can be discerned that information action proper in principle consists of four phases: information need, information source, information, and information outcome (cf. Limberg 1998, 15). Information action is a process that starts from an information need, advances to information seeking, and ends with an information outcome (see Krikelas 1983, 7; Savolainen 1990, 72; Savolainen 1994, 103; Savolainen 1999b, 79; Vakkari 1997, 463). In other words, information action is a journey from gappy knowledge to employing new knowledge (cf. Kuhlthau 1991, 362). Situation provides the necessary context for this process (cf. Byström 1999, 39). One may be confused as to how stages can be all these things (situation, need, source, information & outcome) when conceptually they entail such different characteristics and respond to such diverse conditions. Yet, it is more than justifiable to claim that the acts that these concepts stand for are before all else steps of information action whose primary purpose is to resolve the situation in a satisfactory manner.

Information action occurring in a specific situation is in itself not only a process, but also a part of a larger process (see Vakkari 1997, 463). This could be sense-making or ”mastery of life” (see Savolainen 1993a; Savolainen 1995a; Savolainen 1995b), for example.

The most convenient way to illustrate any theory is to present a visual map of it. In creating a process model of information action, I take Dervin’s model of sense-making (in Figure 1) as the point of departure. From the perspective of information action, the triangular model of situation-gap-use is assumed to work so that in a certain situation, the actor has an information need, and he appraises information according to what purpose he can use it for (Dervin 1983b, 10). By taking advantage of the framework of information action elaborated so far (above), I ended up with the *square* of situation-need-seeking-outcome with barrier at the middle (Figure 2). The image is a graphical presentation of the formal theory grounded upon the Sense-Making metatheory. It is by and large a derivative of Sense-Making, although ”seeking” and ”barrier” originate from information seeking research. The model is applicable to the domain of information studies only. The new formal theory describes information action from the actor’s point of view in any real-life context.

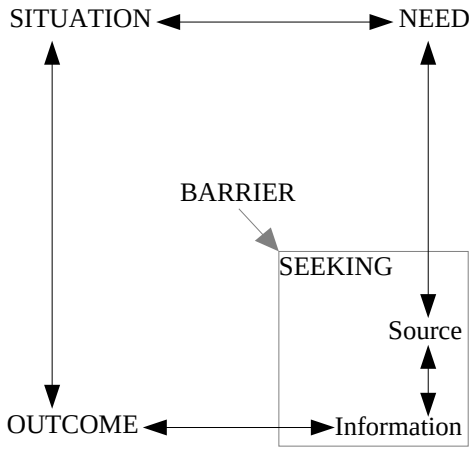

FIGURE 2. General process model of situational information action

Figure 2 indicates the major concepts of information action. Conforming to the deliberation above, information seeking has been separated into ”source” and ”information”. All the concepts (except for ”barrier”) may be thought of as depicting the various stages of information action, as well. Barrier is a potential factor that is seen as deterring information seeking. The division of the process into discrete phases primarily has an analytical function. In reality, the phases of the information process are more disorderly, and the boundaries between them are quite vague (Byström 1999, 39).

It may be hypothesized here that the arrows in the model (in Figure 2) stand for both

interrelationships between concepts and the direction of process, from one stage to another. The prototypical process of information action is assumed to begin in a situation (see King & Palmour 1981, 71), and end in an information outcome. On the one hand, the framework presumes that each stage is potentially both *influenced* by all preceding stages, and *influencing* all following phases. In theory, the closer (i.e. having fewer steps in between) the two stages are to each other, the stronger their interdependence is.

On the other hand, the model also suggests that the process may move forward in two different ways: linearly or non-linearly (cf. Byström 1999, 40). *Linear* progress is represented by an arrow pointing clockwise. Advance is linear in the sense that the actor proceeds from one phase to the phase that logically comes after it. So for example, information seeking is a natural sequel to information need. Traditionally, information seeking has been conceived precisely in this light, as movement from one stage to the next, one step at a time. *Non-linear* progress is marked with an arrow pointing counterclockwise. In this case, the process does not go forward logically or ”as it should”. Here, non-linearity imports that information action takes one ”step back” (e.g. from information outcome to information again). The person can always in a way ”go back” to the stage which preceded the current one, if he so wishes. In other words, if he is not constrained by barriers, he can at any time retrace his steps over and over again. An instance of this backtracking would be as follows: if the person gets a piece of information from an information source, but is for some reason not satisfied with it, he can go back to the source and perhaps rephrase his question.

The portrayal of the information action process so far may have given one the impression that the person who seeks information consults no more than one source of information in each situation that gives rise to a need for information. It is reasonable to propose that the actor may actually seek out more than just one source (ibid.; Savolainen 1999b, 92; see also Kuhlthau 1991, 361). It could well befall that the person seeking information cannot obtain enough knowledge pertaining to a certain need of his from a single source of information. Therefore, in order to get all the necessary information, the individual may have to turn to another source, and after that to another, and yet another, until he feels satisfied with his ”catch”. As concerns information use, Brenda Dervin finds fault with information seeking research having a habit of reducing the outcomes of many occurrences of sense-making to a single eventual outcome. Sense-Making, however, realizes that the process may have multiple and even contradictory outcomes. (Dervin 1999b, 740-741.) These points were attended to in implementing the study, and are dealt with in the process chapter (7).

3.4 Information action in the context of interest in the paranormal

The task of preliminary theory building is nearing its end. I have managed to pull the metatheory down to the middle level of abstraction, thereby succeeding in giving the research area a meaningful form. However, it is obvious that the general model of information action cannot be directly operationalized. This means that the frame of reference has to be further elaborated. In other words, the formal theory needs to be concretized into a substantive theory which specifically appertains to information action germane to interest in paranormal phenomena. According to Grover and Glazier (1986, 233-234), *substantive theory* is ”a set of propositions that furnish an explanation for an applied area of inquiry”. Unlike a metatheory (or formal theory), a substantive theory[14] is empirically testable (Vakkari & Kuokkanen 1997, 498).

The scientific community has seen a plethora of substantive Sense-Making theories, with virtually every Sense-Making study introducing a slightly different version from that of others. This is because a substantive theory must be applicable to a particular research setting. It must be specific enough to allow for a straightforward operationalization of the theory into concrete research questions. Because the researcher is interested in certain questions, each substantive theory tends to be unique (see

[14] Vakkari and Kuokkanen actually speak of ”unit theory” which is equivalent to substantive theory in signification.

Kumpulainen 1993, 28). Sense-Making suggests that the attributes used in research built on it somehow attend to the central premises of the theory — movement, time, space, and gap (Dervin 1999b, 743). Some ”prototypical categories” of situation, gap, and use have been created in such studies (Dervin 1998; Kumpulainen 1993, 28).

The basic structure of the substantive theory here is dictated by the formal theory delineated previously. Its elaboration is accomplished by simply specifying the main concepts with subconcepts that appear fruitful for either understanding leisure time information action in the domain of the supernatural, or developing the model of information action and the theory of Sense-Making. Most of these subconcepts come from the literature on information seeking and Sense-Making, while some emerged from the data. This cross fertilization could give a boost to theory growth which neither approach might ever achieve on its own. I endeavour to define the subconcepts at such a concrete level that they can easily be operationalized into research and interview questions.

Situation

Situation Movement State. Within Sense-Making research, a most heterogeneous host of subconcepts has been developed for the concept of situation (see Dervin 1983b, 14-15, 60). The most pivotal one is Situation Movement State which signifies the way in which the individual perceives his movement through time-space as being stopped (ibid., 15, 60; Tuominen 1994, 69-70; cf. Dervin 1992, 75). This ”block on the road” raises a gap (or information need) in the actor (Dervin 1983b, 15).

Motive for action. The person’s intention is to be taken seriously, as well, because human action is assumed to be purposive by nature. The actor’s goal gives rise to information action (Perttula 1994, 40), so it is a central factor here (Ford 1977, 14). Motive may be defined as the person’s ”aim or purpose which influences the way [he] behave[s]” (*Collins* … 1987, 941), so it could be expected to affect the pattern of information action (see Ford 1977, 38; Wilson 1977, 77), too.

Paranormality of situation. Since this piece of research deals with the supernatural, it is fitting to also probe along this dimension into the very context of action. Paranormality of situation means whether the actor perceives something supernatural in the situation or not. This construct sprang from the empirical data.

Information need

Topic of need. It goes without saying that usually information is needed on a certain topic. It is not enough to characterize the information need merely by its formal features. Since the topic is in fact a crucial aspect of need (see Saracevic *et al.* 1988, 166), it could be vitally important to know what subject the need concerns. Topic of need classifies information needs by the subject domain that they centre on. Dervin (1983b, 16, 63) refers to the selfsame concept with her ”Descriptive Focus”. Some examples of topics would be ”astrology”, ”fortune telling”, ”spirits”, ”reincarnation”, and ”UFOs”. There are virtually an infinite number of potential topics. This subconcept is useful in the sense that it demonstrates best what paranormality is concretely.

5W Focus. Judging from the Sense-Making literature, by far the most utilized gap typology has been the so-called 5W Focus (see Dervin 1991, 67) constructed by Dervin and her colleagues. It depicts the ”aspect of time-space” on which the gap (information need) focuses (Dervin *et al.* 1982, 430), and also reveals assumptions implicit in the need (see Saracevic *et al.* 1988, 166, 167). This categorization is normally presented as a set of five question words with the initial of ”W” (see Dervin 1983b, 16, 62; Dervin *et al.* 1982, 431). The query may intimate ”existence or verification, identity or definition, quality, relation, number, location, or time” (Saracevic *et al.* 1988, 167).

Time Focus. Yet another dimension of information need is that of time (Landau *et al.* 1974, 424). Time Focus — although having attracted less attention than 5W Focus — is taken in, because Sense-Making pays attention to the actor's timescape (Dervin 1999b, 744). This subconcept classifies gaps (needs) according to which time period in relation to the instant of need formulation they focus on.

Information source

Type of source. A natural point of departure for categorizing an information source is to determine its type. This entails analysing what kind of an entity it is.

Tactic of seeking. There are various strategies that the actor can exercise to approach information (Erdelez 1997, 413). E. Lenz (1984, according to Johnson 1996, 51) deems these modes of searching a noteworthy dimension of information seeking. Here, tactic of seeking is the way in which the individual looks for a specific information source. Thus the subconcept does not denote the overall strategy of information seeking, or the source that is turned to (cf. Dervin 1983b, 19).

Reason for choosing. Johnson (1996, 37) argues that selecting an information source is frequently the first, and possibly even the most significant, "step in information seeking". If this is so, then the reason for choosing the source becomes a salient issue. This reason can be conceived as the principal factor which explains why the particular source is selected by the seeker (see *Collins* … 1987, 1198). The subconcept is somewhat akin to that of relevance (see e.g. Cosijn & Ingwersen 2000). The basic difference between the two abstractions is that relevance judgments are conventionally done in order to filter "the wheat from the chaff", so to speak, at the same time as sources (or references to them) are consulted. The reason for choosing, on the other hand, concerns a singular source and is probably decided on in advance. Even sources considered as relevant may not be picked out by the individual. More importantly still, relevance primarily deals with information (cf. ibid., 537), whereas the reason for choosing pertains to its carrier above all.

Information

So far, research has shown little interest in eliciting types of information (Rich 1997, 20). Although Marcia Bates (1999, 1044, 1045) and Louise Limberg (1999a) remark that information studies are principally occupied with the form, structure, and organization of information, it would be dangerous, I think, to neglect its content. Exploring the meanings that people make of information could prove to be equally pertinent (see Limberg 1998, 229). Indeed, there is some empirical evidence that information seeking and use are not separate from the content of information (Limberg 1999a; Limberg 1999b, 131-132), which challenges the dominant conception of information seeking as a content-free process (Limberg 1999a). Hence in this work, information is principally conceptualized from the viewpoint of meanings that are attributed to it.

Topic of information. Referring to the debate above, one potentially important aspect of information is its topic (see Wilson 1980, ch. 4; cf. Hjørland 1998, 610). This topic is the main theme of the obtained piece of information.

Time Focus. In this case, Time Focus stands for the chronological period which the piece of information concerns relative to the moment of its acquisition.

Method of reception. Information is gained with a particular method — or "mode", as Fritz Machlup (1979, 451) calls it. The manner in which information is obtained helps the researcher understand the concrete context of information seeking. The reception of

information refers to communication between the individual and source (see Wilson 1980, ch. 4; Yoon & Nilan 1999, 875), albeit here it involves communication from the source to the person only. All in all then, the method of reception can be defined as the way in which the actor gets information from its source. Wilson (1980, ch. 8) argues that all possible ”transfer mechanisms” of information should be included in the analysis, so they will not be delimited in this study.

Two of the above subconcepts — *topic of information* and *Time Focus* — are informational counterparts of the matching subconcepts under ”information need”. The purpose behind this is a plan to analyse how an intention is realized or whether it is realized at all, and to what extent the need and information meet each other.

Information outcome

Information use. Information use is a key component of information action (see Ford 1977, 14). To date, however, trying to categorize information uses has not been one of the strong sides of research (Rich 1997, 20). The study at hand therefore attempts to tease out the different ways of employing the acquired information.

Information effect. A measure of the successfulness of information seeking, and as such quite a critical subconcept in the whole framework, information effect signifies the change in the person or his situation caused by the received information (see *Collins …* 1987, 451). In the spirit of Sense-Making, these effects are divided into helps and hurts (see Dervin 1983b, 9, 12, 17, 65; Dervin 1999b, 739; cf. Dervin & Frenette 2000). Dervin (1983b, 17) views *help* as facilitating and *hurt* as blocking the individual’s ”picture-making […], movement, and gaining of desired ends”.

Barrier to information seeking

Type of barrier. The basic nature of barrier to information seeking is intended to reach by the concept of type of barrier.

Stage in process. So that the barrier could be integrated into the rest of the model of information action, it must somehow be connected to other concepts. For this cause, the abstraction of stage in process is taken along. This imports the phase of information seeking in which the impediment is encountered by the individual.

Process

The main concepts together with their subconcepts are always related to a certain stage in the process of information action. However, it is also necessary to describe things that deal with the advancement of the process. Since no subconcepts have really been developed for process — at least in information studies — that could be of use here, a grounded approach seems to be called for. That is, these subconcepts will have to be created inductively from the empirical data. This effort is naturally supported by the more general treatment of process in the literature. These new process concepts will be introduced in chapter 7.

The whole

The ”skeleton” of the formal theory has finally been incarnated in the ”flesh” of a substantive theory. The model developed here functions as a conceptual instrument in the empirical part of the current piece of research. In order to get the whole picture, it is requisite to exhibit the substantive theory as a visual representation (Figure 3), too, for

the sake of the large number of concepts. The graph is a conceptual map of the substantive theory. A brief account of it is in order. The model is a specification of its formal theoretical counterpart (in Figure 2). The bulleted items under each stage or main concept represent not only subconcepts, but also variables in the traditional sense. The function of the arrows remains unchanged, that is, they indicate the possible transition and influence between the stages of the information process. Explicating all the conceivable relationships between the subconcepts could easily double the length of this chapter, so I must in the main settle for this modest enumeration for now.

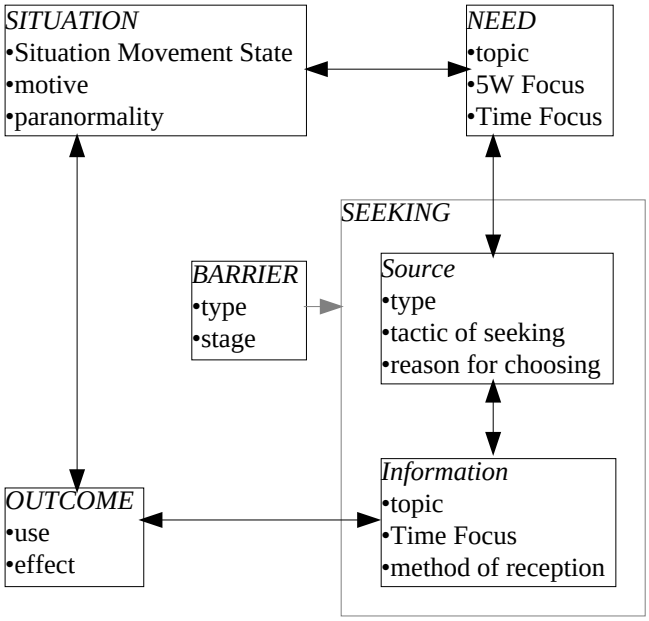

FIGURE 3. Specific process model of situational information action in the context of the paranormal

The main purpose of the model (in Figure 3) is to help me conceptualize and understand the object of study from the chosen viewpoint. Because of its comparative generality, however, the model can, for the most part, be applied to researching information action related to not only paranormal affairs, but any other (non-work) sphere as well. Actually, the sole subconcept which involves the supernatural is paranormality of situation.

Categories

The theoretical basis of this study has been laid out now. The only thing that is still missing are categories. In order that phenomena occurring in the research data can be meaningfully compared and contrasted, the subconcepts need to be further divided into classes. These represent the different values of the variables. Categories for the subconcepts were found in the literature, often in connection with their relative subconcept. Types also frequently emerged out of the data. They will be revealed in chapters 5 to 7.

3.5 Research questions

In this thesis, I am interested in the whole process of information action, not just in some parts of it. Therefore the basis for formulating research questions was the substantive theory presented above in its entirety. Each stage or main concept in the model of information action (Figure 3) could be looked upon as a small research problem of its own. This involved a rather simple procedure in which each concept was converted into a question. This is how I devised the first five main research questions.

The last, sixth question arose from the necessity to scrutinize information action as a process. However fruitful these questions may be, they did not allow me to answer them directly. This was because they are not specific enough. They had to be further divided into tangible subquestions that could actually be replied to. These answers will be able to jointly respond to their respective main question in due course. In translating the subconcepts into subquestions, a procedure similar to that with the main concepts and questions was followed.

As a matter of course, the generation of the research questions was also shaped by the metatheory. Sense-Making does not oblige the scholar to ask any particular research questions — rather it encourages him to pose questions from a certain point of view (Dervin 1999b, 735). The viewpoint adopted here was that of individual sense-making.

Because seeking paranormal information had never really been examined before (except by me), and because I intended to study the whole process of information action, and because the framework contains a great many concepts, the research questions (below) are of the elementary kind. After each research question, there is a note about which concept (above) is the origin of the query, and which question(s) in the interview schedule (Appendix B) are operationalizations of the particular subquestion (and subconcept). Accordingly, I came up with these research questions:

1) In what kind of situations do people seek paranormal information? (*Situation*)
    - what are their Situation Movement States? (*Situation Movement State;* A1-2, B1-2)
    - what are their motives for action? (*Motive;* A5, A7)
    - do they perceive anything supernatural in the situations or not? (*Paranormality;* A1-2)
2) What are people's needs for paranormal information like? (*Need*)
    - what topics do they need this information about? (*Topic;* A3, C1, E5)
    - what questions do they have? (*5W Focus;* C1, E5)
    - which relative times do these needs focus on? (*Time Focus;* C1, E5)
3) How do people search for paranormal information? (*Seeking*)
    a) What sources of information do they turn to? (*Source*)
        - what types of source do they consult? (*Type;* E1)
        - how do they look for these sources? (*Tactic of seeking;* E1)
        - why do they select these sources? (*Reason for choosing;* E2)
    b) What kind of information do they get? (*Information*)
        - what topics is the information about? (*Topic;* E6)
        - which relative times does the information deal with? (*Time Focus;* E6)
        - how do they get the information from the source? (*Method of reception;* E6)
4) What are the outcomes of obtaining paranormal information? (*Outcome*)
    - how do people use this information? (*Use;* G1)
    - how does this information help or hurt them? (*Effect;* G2)
5) What kind of barriers to seeking paranormal information do people experience? (*Barrier*)
    - what types of barrier do they perceive? (*Type;* E12)
    - at which stages of the process do they face these barriers? (*Stage;* E12)
6) What is information action like as a process? (*Process;* B7, E14-15, G4)

This 24-item list of research questions represents all the problems which I am trying to resolve with the aid of the research project at hand. Due to containing jargon of information studies, the specific research questions are naturally not the same as those that were actually asked from the participants in the investigation.

4 Methods

The foremost problem with researching or talking about paranormal phenomena is the fact that ”in everyday life, we can never know for sure when an experience[15] is paranormal by nature” (Virtanen 1974, 170). Because of this in folklore, for example, experiences that are supernatural in the opinion of people themselves are also considered as supernatural by researchers (Virtanen 1977, 41). This is probably the sole reasonable and humane way to examine paranormal experiences. If we truly aspire to understand conceiving things as supernatural, we have good grounds for examining phenomena from the actor’s point of view. An approach such as this can be called phenomenological. In this type of research, belief systems are scrutinized on their own terms, and they are not attempted to reduce to conform to the prevailing scientific world view (Caird & Law 1982, 153). However, owing to the inherent subjectivity of data acquired in this way, its truthfulness cannot be determined to any degree. It must simply be accepted at its face value, acknowledging at the same time that it has little weight as evidence either for or against the existence of paranormal incidents. Even so, supernatural meanings may be just as valuable objects of research as supposed supernatural phenomena themselves.

4.1 Sense-Making methodology

A study that examines the individual’s information processes demands methods that are able to tap his experiences (Kuhlthau 1993b, 79). The Sense-Making approach provides the means to this (Perttula 1994, 43). It yields an accurate portrayal of the advance of the information seeking process (Savolainen 1993a, 11) from the actor’s perspective.

The Sense-Making metatheory is inseparably interwoven with methodology and methods. Dervin announces that the framework endows the researcher with ”methodological guidance” for conducting research. It may be said that Sense-Making methods are derivations of the theory (Dervin 1992, 62). The approach has underlined the importance of a descriptive and inductive mode of inquiry, because this facilitates further investigation (Dervin 1983b, 24). However, Sense-Making research has transcended the phase of mere exploration, and widened its scope into the deductive realm, too (Spirek 1999, 93, 94). The Sense-Making methodology can be characterized as ”*ethnographic* because it allows respondents to define and anchor themselves in their own realities, *qualitative* because it is built on open-ended interviewing and reports findings primarily in qualitative terms, *quantitative* because procedures for quantitative analysis have been developed” (Dervin 1989a, 76).

4.2 Collecting data

The Sense-Making methodology is most prominent in collecting data (Dervin 1992, 70). All data collection methods founded on Sense-Making have some common qualities, the most noteworthy of which are ”high use of content-free interviewing structure”, ”high respondent interest and involvement”, and ”longer than average interview times” (Dervin 1983b, 13-14). The primary Sense-Making method is interviewing (Dervin 1992, 62). The questions should mirror the metaphorical premises of the metatheory: ”time, space, movement, gap, power, history, constraint, outcomes, repetition, and change” (Dervin 1999b, 742). The researcher is, however, duty-bound to ”not name the world for the actor”, and instead to let ”the actor […] name the world for herself” (ibid., 740, 742; see also Cardillo 1999, 21). This allows the true voice of the individual to be

[15] Actually, Virtanen must be speaking about a *phenomenon,* because the supernaturalness of an experience can usually be determined by the individual.

heard (Dervin 1999b, 742), and rightfully enables him to act as a theorist of his own reality (Cardillo 1999, 22). Open-ended questions are preferred in Sense-Making interviews, but close-ended (alternative choice) ones are also acceptable, provided that they reflect the person's point of view (Dervin 1989a, 79). Since sense-making is a process, also the interview process is prone to be "circular and repetitive" (Dervin 1999b, 746).

Micro-moment time-line interview

An array of interview techniques have been developed within the Sense-Making community (Dervin 1983b, 10). The "core method" presented in the literature is the so-called "micro-moment time-line interview" (see ibid.; Dervin 1989a, 77; Dervin 1992, 70; Savolainen 1993b, 24) which has been successfully employed in many situational studies (Cheuk 1999, 25; Schamber 2000, 734, 741). Being a product of the methodology, it is a fine complement to the theoretical part of Sense-Making. Therefore it was only natural to choose this method of data collection for the present study. Another argument for selecting this method was the necessity of doing a qualitative piece of research, and an interview technique seemed like the best choice, owing to the confidential nature of paranormal information. Besides, time-line interview is "highly recommended for exploratory studies" (Schamber 2000, 744) like the current one. Yet a third justification was the resolve to probe information action as a process moving in time-space.

In a time-line interview, one or more sense-making situations are examined in terms of what the interviewee perceived as occurring in them (Dervin 1992, 70). These situations are so-called "critical incidents" (see Dervin 1999b, 742) which deviate from the normal, routine course of life, and hence are supposedly easier to remember by the actor. This method of case selection has been quite useful in examining information seeking since the 1960's (see Hewins 1990, 148). When information action is scrutinized as a process, the object of research should be some chain of purpose-oriented activities during which observable changes in knowledge or skills can be discerned (Perttula 1994, 39). So at the beginning of the time-line interview, the interviewee is asked what happened first, what happened next, and so on (Dervin 1983b, 10; Dervin *et al.* 1982, 428; Savolainen 1993b, 24; Schamber 2000, 735; cf. Dervin 1989a, 77), until the whole chain of events has been sorted out. These steps are so-called "time-line events" (Savolainen 1993b, 24). It is worthy of note here that the informant is to be free to select "what time-space moments to attend, how to attend them, how to order them, […] and how to connect one time-space moment to another" (Dervin *et al.* 1982, 428).

Then, each step is looked at more closely. The time-line interview focuses on a micro-moment which means one step or one round in the Sense-Making triangle of situation-gap-use. (Dervin 1992, 70.) Thus the interviewee is subsequently inquired about how he saw the situation in which he stopped, the gap that he faced, and the help that he got (Dervin 1983b, 10; Dervin 1989a, 77; Dervin 1992, 70; Dervin *et al.* 1982, 429; Savolainen 1993b, 24; cf. Dervin 1989a, 78; Schamber 2000, 735). It depends on the purpose of the research which element or elements are foregrounded in the interview, and what other elements are taken under scrutiny (Dervin 1992, 70). At any rate, it is characteristic of time-line interview that the inquiry process is highly structured (Dervin *et al.* 1982, 429; Schamber 2000, 735), although open-ended questions are favoured (ibid.).

In Suvi Perttula's opinion, the strengths of time-line interview encompass the fact that by using this method, "it is possible to make out the episodes (steps) of a series of events, as chronologically organized according to the actor's point of view". Perttula considers as a weakness of the method the fact that interviewees conceive step-taking and micro-moments as involving external deeds only, and do not talk much about their thought processes linked to these. (Perttula 1994, 44.) I maintain that this weakness hinges on the researcher: if he knows how to pose the "right" questions, the interviewee's internal action can be examined, as well. However, I do agree with

Perttula's (ibid., 44-45) argument that unconscious activity cannot be probed by questioning: "the time-line interview method is first and foremost applicable to studying action that can be verbally expressed and is conscious".

Participants

The study population of this doctoral dissertation is formed by all Finns who are preoccupied with paranormal affairs, and who are at least 16 years of age. This group is the same as in my master's thesis (Kari 1996). Since the goal was to peruse information action in the context of going in for the supernatural, it would not have made sense to investigate people in general. The size of the study population cannot be determined with any accuracy. Since there were some five million inhabitants in Finland at the time of gathering the data, and because about every other individual seems to believe in paranormal phenomena (see section 1.2), but as the volume of the public's *interest* in these issues has not been measured, I would estimate that the study population is in principle comprised of anywhere from a hundred thousand to some two million people (children are discounted).

Most of the participants were selected randomly via the subscription register of *Ultra*, the leading Finnish magazine on the supernatural, but some volunteers were also recruited at a major annual seminar on the paranormal called *Ultrapäivät (Ultra Seminar* in English) which was held in July 1995. Anybody keen on the supernatural had at least a theoretical chance of being elected in this study. Hence, I presume that these two groups of people are sufficiently representative of those interested in the paranormal, albeit it is likely that they are more active devotees of the paranormal than the study population at large. I chose these assemblages, because they were most easily reachable. I was forced to resort to two means of looking for interviewees, because it was not that easy to find volunteers at the seminar. Thus the group of interviewees was not a genuinely random selection.

At *Ultrapäivät*, I told an audience of several hundred people about my piece of research, and requested volunteers to come forward. So seminar goers took part in the study of their own accord. The interview was usually fixed for the same or next day.

Of all publications, why did I opt for *Ultra* (http://www.ultra-lehti.com), then? The magazine was one of the oldest, had the biggest circle of readers, and embraced the broadest subject area among all magazines dealing with supernature in Finland, so the composition of its subscribers was probably closest to that of the study population. Most of the subscribers were chosen on the basis of their place of residence so that they were living somewhere not too far away (within a radius of about 100 km) from Tampere, the city in which I conducted this research. For financial reasons, the sampling emphasized Pirkanmaa (the province whose capital Tampere is), although a few persons from elsewhere in South Finland found their way in, too. It may be presumed that although this host was geographically quite concentrated, they adequately represented the whole country. I contacted these interview candidates by mail, sending them an invitation (Appendix A) to take part, and expected them to respond within about ten days. If I did not hear anything from them, I made a telephone call to persuade them to co-operate. In the preliminary conversation with the informants, I briefly introduced the subject of my study, and fixed a time and place for the interview proper. There were many individuals who were initially selected in the sample, but who did not wish to participate. Those who accepted the invitation and were otherwise eligible were eventually interviewed.

My aim was to study the experiences of 20 people. I deemed this number large enough to produce a body of data with an adequately representative and rich content. On the other hand, I did not want to include any more than 20 partakers, for I thought that material from 20 interviews would be sufficiently saturated, and if this number were exceeded, the work load needed to transcribe and analyse the data would be too great for a lone researcher. A host of 22 people offered to be interviewed, but I left two of them out. One person had an extremely weak hearing, so that the interview would hardly have succeeded save by shouting. I had to turn down another individual, because the quota of 20 informants had already been achieved. Three years later, however, a

letter was sent to me by a person who wanted scientists to examine some spiritual theories of hers. She had chosen to contact me on the basis of a popularizing article (Kari 1998a) on improving research on supernatural matters. Her experiences of seeking paranormal information were so unique that I just had to take her along. So I ended up with 21 participants.

When the final sample is compared with the basic study population, it must be admitted that the former did not represent the latter very well. The foremost cause for this is the fact that many (if not most) of the interviewees were apparently ”insiders” in the domain of the paranormal: they tended to believe in the existence of supernatural phenomena, knew relatively much about such things, had experienced several inexplicable phenomena themselves, etc. For many, the paranormal and supernatural information were almost a way of life. I do not reckon that these people necessarily represented the ”typical” person interested in supernature.

Interviews

The interviews were conducted at the same time as the mail survey for my master’s thesis (Kari 1996). I chose to carry out both of these simultaneously, because in this way, I had the chance to get a filled-in questionnaire from the interviewees, too. This in turn offered a unique opportunity to combine two completely different data sets. As a matter of fact, the original intent was to incorporate both of these into the master’s thesis. Alas, I was unable to take advantage of this possibility, for the bulk of the material was totally overwhelming. Hence, I decided to save the interview data until later utilization — this thesis.

The interviews were done in South Finland in the summer (June and July) of 1995, during some 40 days, except for the last one which was done in the autumn of 1998. They usually took place at the interviewee’s home or, in the case of participants in the seminar, in a hotel room. Each study participant was personally interviewed by me once, except for the last person whose unusual experiences required two interview sessions to be properly dealt with. The shortest interview took 40 minutes, and the longest one lasted 3 hours and 40 minutes. The total duration of the interviews was some 38 hours, which makes an average of about 1 hour and 50 minutes per interview.

The principles of the time-line interview method (brought forward above) were heeded quite closely in applying them to the study at hand. Owing to the more detailed framework here, however, many new elements were added, the most notable of which were information seeking and its barriers. I did not give emphasis to any components at the expense of others, because the objective was to get a balanced and holistic picture of information action. After the fashion of time-line interview, the interviews held by me were fairly structured, as can be seen by looking at the interview scheme (Appendix B). A structured interview method suited well to the purposes of my study, because it would ease analysing the data.

Each interview ran through one or more processes in which the person had engaged in seeking paranormal information. Most of the participants could remember more than one such process — the maximum was 15. The grand total of all discernible whole processes connected to the supernatural was 83, but only about one third of these could be taken along. I strove for choosing processes which had obviously been important to the interviewee, or which had been different from those of the other interviewees. That is to say, my purpose was to find meaning and variation in the interviews. As for the relationship between external and internal acts, I essayed to take into account both of these aspects of information action. This is palpable in the design of the questions in the interview scheme. All interviewees were asked approximately the same questions, although situational variance determined to a high degree which questions needed to be asked and which did not, in each instance. An exception to this was the last case. In three years, the model had changed somewhat, and the questions in that interview reflected my altered thinking. Moreover, they exhibited my foreknowledge of that particular person’s overall situation. In spite of this, the main theoretical ideas still remained relatively untouched.

The typical way to start an interview proper was to ask whether the person had been in a situation in which his own knowledge of the paranormal had been insufficient, and he had had to look for an answer or advice somewhere else. If so, I would ask the interviewee to describe the situation. Then I would inquire what kind of questions he had had, either in his mind or as spoken out. After this, I would query what he had done to find answers to his questions. I specifically wanted to know who or what he had contacted, and what sort of an answer he had got from this source. In this connection, I would request the person to tell me if he had had any difficulties in locating the source of information or in getting the answer. Finally, I would ask the interviewee whether this information had helped or hurt him in any way. If a stage of the process had recurred (for example, the person had turned to more than one information source), I would accordingly repeat the questions for each different occurrence of the stage. On the other hand, if a stage of the process had not occurred, I would simply skip over it. If the process of information action had lead to another information need or situation, I would start a new round of questioning. If something was not entirely clear to me or the informant, I asked him to specify his words or rephrased my query, respectively.

The interviews had their own share of difficulties. Firstly, the success of the interviews turned out to be essentially affected by the acoustic environment and the tape recorder I employed. That is to say, it was not until transcribing the interviews that I found out that the quality of the recordings left something to be desired. The quality was at times impaired by background noise, echo, too long a distance between the recorder and interviewee, as well as a fragile voice of the speakers. However, this issue did not pose a serious impediment to analysis, except in two instances (see below).

In a few cases, the participant could not recall any specific situation in which he would have needed paranormal information, but instead talked about a broader, long-term process in which he had time and again availed himself of information sources of a certain kind, for example. I decided to include generic process descriptions of this sort in the study as well, because they might have something to contribute to developing the theoretical model.

If several similar sources of information (especially books) had been consulted, the informants often referred to them as one group, without expressly specifying individual entities. In some instances like this, I managed to dig out one or two exemplar sources that were analysed in this study. In others, however, no particular source stood out in the interviewee's mind. Here, I had to treat the sources as a single originator (cf. Tuominen 1992a, 50). Because this is basically a qualitative investigation, I decided to deal with them in the same way as the interviewees did, that is, by examining meanings rather than exact numbers.

There was an unfortunate lapse of reason with investigating information outcomes. Already during the first few interviews, I began to feel that it was futile to ask about both the application and helpfulness of information, since these appeared to refer to the same thing. Thus, in the majority of the interviews, merely helps and hurts were inquired about. In retrospect, however, use and effect are two entirely different phenomena, which realization did not surface until I was well into the analysis. Luckily enough, a part of the informants brought out the angle of usage spontaneously, so in the final analysis, I judged it feasible to include information uses in the scrutiny. Still, the results pertaining to these must be considered as preliminary.

It was only later discovered that some stages of information action were not specifically discussed in the interviews. It was usually so that a part of a whole process was dealt with thoroughly, while another part nearly rested on mentionings. Loyal to the sphere of the study, I endeavoured to focus on those subprocesses which had perceptibly involved supernatural facets. Therefore, amidst the more superficially treated spots in the processes, there inevitably remained blanks which might in actual fact have revealed a stage of information action. For some reason, the interviewees appeared to accentuate situations, sources, and information, whereas needs and outcomes received less attention. The meanings that the participants attached to things, as well as their ability to remember happenings and articulate their thoughts naturally influenced what became included in the interviews. The respondents had to be allowed to decide for themselves — within reasonable limits — what they wanted to talk about.

Omitting stages might have been linked to the respondents' mindfulness of them, as well. Katriina Byström (1999, 39) namely maintains that a large portion of the process takes place without "a conscious consideration". According to Schutz and Luckmann (1989, 53), the degree to which the actor is aware of the various steps of the process fluctuates depending on the discreteness of the phases and on his "habituation to the action in question". The gappiness of the processes was also affected by their expanse, the finite time allocated for each interview, and my ability as an interviewer to see things for what they were. On the other hand, methodological source books do say that "one never gets or even can get everything". As this is my first trial at qualitative research, I had to be satisfied with the "catch".

The interview situations were impacted by many sorts of factors, most of which were beneficial. In the majority of the cases, the interaction between the researcher (me) and the researched was rather friendly than formal. This was particularly obvious with the younger interviewees. My own young age probably effected this phenomenon. Most of the informants seemed enthusiastic over this research project. This interest was all but directly reflected in the duration of the session: the more the interview intrigued the individual, the more prolonged it was prone to become. What surprised me was the interviewees' openness about such a tender issue as this: they frequently told me about their private affairs as though to an old acquaintance, without many perceptible signs of covering up or concealing things. There were exceptions, of course, but these were a definite minority. Some reasons for this candour could be the informants' decisive endorsement of supernature, and on the other hand, the sincere interest with which I approached their life-world.

Instruments

I used five instruments to facilitate the interviews. First, the informants were given a *questionnaire* to be filled in beforehand which provided me with details about their background. Second, I had an *interview scheme* which helped me ask the same questions from all participants. Third, I employed a *micro cassette recorder* with which I preserved the interviews. Fourth, for each close-ended question, I had a *list of alternative responses* on a separate piece of cardboard, which made it easier for the interviewees to answer those queries. Fifth, in each interview, I was equipped with a *sheet of paper and a pen* so that I was able to take brief notes on salient matters to refresh my memory both within the session and later during the early phases of analysis.

The *questionnaire form* inquired of the respondent about his demographic characteristics, values, mastery of life, habitual seeking of paranormal information, and way of life (see Kari 1996, 191-198). The sheet was eight pages (A4) long, containing a one-page introduction. It held both open- and close-ended questions. The opinion poll had nothing to do with Sense-Making, for it was contrived to primarily serve the purposes of the survey (Kari 1996) rather than those of the present interview study. In spite of promises, one of the interviewees never returned his paper. Fortunately this did not matter anyway, since his case was disqualified on other grounds in the end.

The *interview scheme* was the central instrument that was supported by the others. By taking advantage of the original theory basis of this study, of the description of the time-line interview technique, and of interview schedules in earlier Sense-Making studies (Kumpulainen 1993; Tuominen 1992a, 118-120), I constructed a five-page scheme (Appendix B). This contains themes (often stages of information action) and questions that are in the main direct operationalizations of the then (1995) dozens of research questions. The scheme incorporates both Sense-Making and information seeking terminology (as appropriate), and is rather detailed and structured. The primary difference between the interview and research questions is that the interview questions aimed at matching the participants' picture of the world and using their language. If conceptual jargon had been used, the questions might not have made much sense to the interviewees. The default order of the questions was settled beforehand, although it was flexible in practice. Altogether there are as many as 49 questions presented roughly in the same order as in the model, from situation to information use. Of these interview

questions, 32 are open-ended and 17 close-ended ones. Before doing the interviews, I was not sure whether the scheme should be tested in advance in order to reveal its deficiencies. In the end, I resolved to take a risk and try out the interview scheme without any pilot study. The decision proved correct, for the scheme appeared to work even surprisingly well from the start.

The interview agenda does have its faults. The most notable one is the use of close-ended questions, which was not really in keeping with the ambition to let the partakers name their world. As a mitigating circumstance, I must state that every effort was made to speak in their own language. Still, those enquiries are accompanied by a list of possible answers that often exhibits too fine a scale. For instance, a five-point, ordinal gradation should probably be collapsed into an assortment of three options. Nearly all alternative choice queries reflect initial theoretical components that had to be rejected later (see below).

Because the interview scheme was created already six years ago (in 1995), the form of some of the themes and questions does not correspond to the present framing of questions any longer. However, the underlying content of these enquiries has not changed much, which is, of course, more important than their form. Nevertheless, when the original interview and current research questions are compared in detail, some discrepancies become evident. A few subconcepts (motive for action, paranormality of situation, Time Focus of need and information, and stage of barrier) were not directly addressed in the interviews, so the answers to the respective research questions had to be inferred from the replies to related queries. This did not pose a grave problem as a whole, but may have somewhat impacted the reliability of these particular results. Additionally, the schedule contains many (particularly close-ended) questions that are remnants from earlier conceptualizations. In the phase of analysis, the mass of interview material required concentrating on the most central questions only, echoing the final theoretical framework in chapter 3. The leftover queries were not asked in vain, however, as their responses frequently provided supplementary information on the main points.

The *alternative choice cards* were meant to refresh the informants' memory, so that it would have been easier for them to answer the close-ended questions. These cards were "home-made" pieces of cardboard, each of which had the available responses to one alternative choice question. Every time after presenting such a query, I handed the matching card to the participant. Although these cards speeded up the interviews to some degree, they were liable to detract from the positive atmosphere of interaction.

4.3 Processing data

The conversion of the interview data from taped speech into text analysable in a qualitative data analysis program was a long and arduous process which started in 1997 and ended in 1998, taking almost one year. First, I carefully transcribed the interviews within a word processor program. They (except for the one from 1998) were not transliterated until late 1997, which task took about five months as half-day work. The informants' speech was written out into text very accurately, almost to the letter. Only statements which had nothing whatsoever to do with the study object were excluded. All unclear words or phrases were replaced with three dashes (---). Those interview questions in the scheme which were actually asked were marked in the text with a few-letter abbreviation, so that every question had an identifier of its own. Specifying and additional queries were typed up in full. The text was accompanied by the following information: the person's code letter and survey identifier number[16], the duration and location of the session, the situation(s) and information source(s)[17], as well as some ad hoc observations on the interview and interviewee. Each interview was placed in a file of its own. The result was a text corpus 330 pages (A4) long, which made an average of almost 16 pages per participant. Each interview was initially read through at least once.

[16] This was appended in order that each informant's questionnaire could be recognized.

[17] These were principally a support for my memory, so that I was able to quickly recall which interview the transcript was about.

Second, the text files had to be converted into a format that *NUD*IST 4* (see section 4.6), the analysis program used, supports. This transformation was mainly cosmetic, for the program only presupposes ASCII format and positioning certain special characters at desired locations in the files. These distinctive characters separate text units from each other. *NUD*IST* allows the researcher to define the length of the text unit. In this study, the text unit was a sentence. Had the text unit been an answer to a question, in many cases it would have become too troublesome to find the particular point in the text to which a code refers. Had the unit been a word, the text would not have made much sense with all the words out of context. The converted text files were imported to a newly-created *NUD*IST* database. This constituted the interview corpus which was to be analysed.

Third, in *NUD*IST*, I had to develop a coding scheme which includes, but is not limited to, all the elements of the substantive theory — from the most general concepts down to the most detailed categories. This code system was twofold. It had segregated code hierarchies by variables and processes. In other words, the intention was to code the material according to what variables and their values could be discovered in it, and on the other hand, how the processes had evolved in reality in the interviewees' perception. An arrangement like this is quite complex and caused overlapping labour, but it facilitated two different modes of inquiry — variable and process analysis. When the need arose, the coding scheme could be revised: old codes could be changed, moved or deleted, and new codes could be added. Owing to interaction with the data, the coding scheme was under constant development from the beginning of coding until the very end of analysis. Occasionally, this even resulted in modifying a concept in the model to reflect the observations better. Ultimately, the number of codes amounted to a huge 3,835 items all of which were not made use of, though.

During the processing of the data, it became apparent that some interviews could not be used in the current study. Three interviews did not really deal with seeking paranormal information at all, and with two interviews, the quality of the tape recording was so bad that it was almost impossible to make out what had been said. This being the case, I had no choice but to exclude those five interviews from the empirical analysis altogether, as a consequence of which I had 16 qualified interviews at my disposal.

4.4 Analysing data

The general objective of the analysis was to organize and abstract the interview material so that it would be possible to answer the research questions. In a Sense-Making study, any methods of analysis may be applied that allow the researcher to discover both general patterns and also departures from these (Dervin 1999b, 747; see also Dervin & Frenette 2000):

> "Each divergence as well as each convergence should be seen as making 'sense' under some condition. Each divergence might point to arenas of hidden or suppressed understandings; or terrains of general human ignorance; or highly contested and self-interested interpretations of events, or interpretations driven by highly different experiences. Likewise, each convergence might point to areas where factizing has led to highly agreed upon useful ends; or terrains of tightly imposed hegemony; or terrains in which the brute force of reality speaks more loudly than usual."
>
> *(Dervin 1999a, 37-38)*

Probably the most common technique which has been wielded in analysing data in Sense-Making research is content analysis. This involves both the deductive application of the Sense-Making metatheory, and the inductive understanding of the data (see Cheuk & Dervin 1999). In itself, this method was not sufficient for the piece of research at hand, so it was complemented by other procedures. Kimmo Tuominen (1994, 68) wonders at how the Sense-Making methodology provides guidelines for data analysis that amount to next to nothing. Because of this, I was compelled to turn to more conventional literature on methods. The analysis of the data leant most heavily on

Matthew Miles' and Michael Huberman's guidebook *Qualitative Data Analysis* (1994) which advises the analyst in a superbly systematic and illustrative manner.

Since the method of data collection was structured interview, analysing the data became less cumbersome, and the results became more systematic, than if the material had been collected with thematic interviews, for example. In spite of this, finding consistency was not straightforward, which may be viewed as being characteristic of qualitative research (see Kumpulainen 1993, 64). As transpires from what follows, the analysis involved both qualitative and quantitative aspects. A qualitative approach was manifest in finding meanings, categories and patterns, while a quantitative approach was exhibited in determining distributions of and relationships between variables. Although exact numbers were elicited via statistical analyses, of course the frequencies and dependencies are not that precise in reality, due to the fundamentally qualitative nature of the study. The analysis proceeded through four consecutive phases in 1998 and 1999, during about one and a half years. In each phase, *NUD*IST* proved to be an indispensable tool.

In a process-oriented study of information action, the unit of analysis is not an individual (see Dervin 1998; Dervin 1999a, 38; Dervin *et al.* 1982, 430), concept, theme, "sense-making instance" (cf. Dervin 1983b, 23; Dervin 1998; Dervin 1999a, 38; Dervin *et al.* 1982, 430), gap (cf. Dervin 1983b, 23; Dervin *et al.* 1982, 430), or even situation, but a *process* (cf. Wildemuth 1990, 331). This process was identified in a chain of events which were connected. Thus one process could include more than just one situation. All observed relevant subprocesses were included in the analysis, not only those which appeared to involve the supernatural or were explicitly discussed in the interviews. This resulted in some "gaps" in the processes and slightly weakened the reliability of the findings, but on the other hand, it produced a more extensive picture of information action. The data contained a total of 27 analysable whole processes. At least on principle and for the sake of potential follow-up research, it was relevant to make a note of which process was whose.

Coding

In qualitative research, the role of coding is salient, because coding is actually the sole method with which the data can be organized to enable systematic breakdown. In this first phase of analysis, the interview data was minutely coded according to the coding scheme constructed previous to and alongside coding. In the current piece of research, the code system was in no respect simple, because of which the coding process became rather complicated, too. Each text unit was coded with all those concepts and categories which could be interpreted as being talked about in it. In this way, all the text units coded with a particular code could be easily located later. I began at the most general level, by first coding all the interviews with their respective code. Then I descended one step down in the code system and coded text units with the appropriate whole process(es). After this, I made a new round, process by process, and coded each text unit with the stage(s) or main concept(s) to which it referred. Next, this basic coding was particularized on the subconcept or variable plane. Finally, the text was categorized. I kept going like this until I reached the lowest or most concrete meaningful level in the code hierarchy. When a text unit was considered to be pertinent to a stage, it was coded under both the variable and process hierarchies with identical codes. Coding barriers to information seeking under the variable hierarchy was not enough — they also had to be coded under their respective stage in the process. Otherwise, it would have been too laborious to singly find out to which interview/process/stage each barrier belonged. Although all irrelevant and invalid interview segments were discarded, ample material survived for the analysis. Coding was the longest one of all the empirical phases, for I spent about a year doing the job.

At this juncture, I encountered many dilemmas whose solution frequently required adjusting the coding scheme. First of all, some stages of information action mentioned could not be coded, because they were not well specified, or because I was unable to determine their temporal position in the process. This means that not all stages made it

into the analysis.

Coding information outcomes had its own share of problems. It was not always self-evident whether a given stage was an outcome of information or in fact a new situation. This difficulty was fruitful in that it clarified the relationship between the two concepts (see section 8.4).

At times, a stage in the process (e.g. information need) was composed of more than one thing (e.g. topic) that could be treated either together or separately. An effort was made to keep the stage inventory as simple as possible, lest it shatter into meaningless bits. However, it was not always practicable to handle heterogeneous stages as single lumps. This was the case when a part of the stage lead into one stage, and another part into another stage (branching) or nowhere (terminating). Also in the event that there seemed to be two or more equally important parts in the phase, it had to be split into smaller pieces.

Determining the values (categories) of variables (subconcepts) was complicated sometimes. The aim was to designate one primary value to each variable of each stage in each process of information action. I determined it on the basis of either what the interviewee himself explicitly held the most significant facet, or which value clearly got most hits (one hit per text unit) in the interview text. Occasionally, selecting the main value was really troublesome, because more than one category seemed to compete for the position. Nevertheless, I always endeavoured to unearth the class that the interviewee had most likely prioritized in the particular context.

Relating some stages (i.e. source and information) of information action in the data to each other temporally was problematical at times. To take an example, one person had visited a Tarot fortune-teller (Source 1). She had picked some cards (Source 2) which she had then interpreted (Information 1) herself. Finally, the fortune-teller had presented her own understanding (Information 2) of the meaning of these cards. In instances like this, I regarded the two sources and pieces of information as having been parallel. These were special cases in which information seeking in a way took place ”within” information seeking. Such occurrences could also be called embedded information action.

One of the greatest problems was depicting the dimension of time with codes. In my view, this is linked to the biggest shortcoming of *NUD*IST:* it does not allow a network structure of codes, merely a hierarchic one. Owing to this, the processes had to be displayed as linear chains, even if in reality they had, for instance, branched into parallel processes. I had no choice but to enumerate stages one below the other, following the observed chronological order as precisely as possible. In order to find a viable solution, I had to resort to another computer program: in the absence of a better alternative, I arrived at spreadsheet software (a module in *AppleWorks;* see http://www.apple.com/appleworks). In this, all processes could be presented side by side, and all stages in the exact chronological order which the informants meant themselves. The spreadsheet also made it easy to see the whole processes in all their variety.

Analysing essence

In the second phase, answers to the first five main research questions were sought via their subquestions by looking at what categories each subconcept had and how many occurrences they had in the data. This across-case examination of variables could be called *essence analysis* of information action. Here, the structure of the process was disregarded, except when searching for interdependencies between the stages. A major task was to distinguish categories and their properties. Many times, variables got such an abundance of different values that these had to be aggregated under more generic values. It was customary that each of these received a few ”subvalues”, but occasionally it happened that an abstract category was left with one concrete subcategory only. In several senses, this was the easiest part of the analysis. The *NUD*IST* code system reports, among other things, how many text units have been coded with each code, but not how many *stages* have been coded with these. That is why it was necessary to input

the primary value of each variable of each stage into a statistical program. In this project, *StatView SE+Graphics 1* (the latest version is 5; see http://www.statview.com) was employed, because others were unavailable. That piece of software made the calculation of distributions possible.

This phase also entailed hunting statistically significant correlations between the variables, both within and between stages. The goal was to unearth those consistent relationships which were probably authentic instead of arbitrary ones. Internal dependencies were computed first, which means that connections were sought between variables belonging to the same stage concept. All variables were ran through like this, stage by stage. In the across-phase analysis, I looked at how a stage appeared to impact the stages coming after it. A fundamental supposition here was that earlier action influences later performance (Perttula 1994, 40). This was causal analysis of a kind, because care was taken that X always preceded Y in the interviewee's experience. For this job, I had to create separate statistics for each stage (situation, need, source, information and outcome) that took into account the advance of the process as phases.

Defining the hypothetical sphere of influence of the stages was not easy. By resorting to common sense, I came to the following heuristic precept: a stage potentially affects all consecutive stages, up till the next similar phase (e.g. from one source of information to the subsequent one). When the manifestation of this next stage was uncertain — due to the lack of data — the blank was assumed to hold such a phase, so that the sphere of influence would not spread too far. Of course, these holes in themselves could not be analysed by any means. Even if a stage of the subprocess in question did not take place until later in the same whole process, it was still considered as belonging to its antecedents' sphere of influence. I scrutinized two variables from different stages at a time, attempting to determine whether the values of the former variable fluctuated systematically with those of the latter one. All variables were gone through like this in an orderly fashion.

Calculating the correlations was accomplished with *StatView.* In figuring out covariations, the "unknown" categories were naturally excluded. Since nearly all variables were of nominal scale, the method of analysis was cross tabulation. The same (equally strict) criteria for establishing statistically significant correlations were applied as in quantitative studies. Depending on the number of classes in the two variables, the correlation coefficient was either ϕ or *phi coefficient* (if 2 X 2 table; see Elifson *et al.* 1990, 416, 420), or *Cramér's V* (if 2 X 3 table or larger; see ibid., 419, 420). Only covariations with a significance level *(p)* of smaller than 0.05 were paid attention to (see ibid., 516). Statistically significant correlations were found aplenty, but almost all of these were so-called "technical dependencies". That is to say, the test measure was significant, but there were not enough observations. More hits per cell were acquired by combining categories, but often this was not an option. Both measures employed are founded upon χ^2 or *chi square* which presupposes that in a 2 X 2 table, the expected frequency of each cell is not less than five, and in a bigger table, at least 80 % of the cells must have an expected frequency of not less than five, and none of these may be less than one (see Siegel & Castellan 1988, 49). This condition was fulfilled by very few dependencies — the rest had to be abandoned.

Analysing process

In this study, the process of information action is not conceptualized as a hazy background construct assumed to describe the nature of information seeking. Instead, the point of departure is to scrutinize this process itself and its structure. Accordingly in the third phase, answers to the sixth primary research question were searched for by doing a kind of path analysis. This within-case scrutiny may be termed *process analysis*. The goal was to chart the different types of processes, identify their critical points, and apprehend their dynamics. The manifestations of the various facets of the processes were analysed both qualitatively and quantitatively. Here, the content of the stages was all but ignored, and instead the structure of the processes was taken for perusal. Perttula

(1994, 39-40) states that processes can be at least analytically divided into chronological stages according to acts. This imports that these phases are not discrete, but overlap each other in the real world. Still, it is presumed that they can be sensibly distinguished from each other with adequate reliability. Here, the stages of information action were fundamentally treated as concentrations of meaning, not according to their actual number or recurrence, although these aspects were noted, too. I also investigated into — and even beyond — the so-called ”steps” that were larger wholes formed by stages. This phase was carried out through meta-analysis, by examining the process code system, spreadsheets, and statistics.

Quantitative analysis was chiefly limited to working out distributions. At times, when ordinal-scale (or higher) variables were concerned, the median (Md_n) value was calculated, too. However, some interdependencies were also tested for between the more systematic process characteristics. Owing to the predominantly nominal-scale nature of the data, I ordinarily used the same measures to determine correlations as in the essence analysis, namely phi coefficient and Cramér’s V. Only when both variables were of ratio scale, or when one of them was of ratio scale and the other was a two-class nominal-scale variable, was the common correlation coefficient *r* applied. Some significant relationships were discovered in this way. An attempt was also made to relate the content (stage variables) and form (process features) of information action, but this did not yield many statistically significant results. The number of observations was simply too low. Of course, this was to be expected, owing to the qualitative make-up of the data.

In the process analysis, mayhap the most substantial snag was the uncertainty about the existence of missing stages. Another complication was engendered by the fact that a sizable share of the whole processes (11 out of 27) were still unfinished at the time of the interview. Under these circumstances, diagnosing the type of some processes, for example, did not succeed. This constrained the kinds of analyses that could be conducted, but was not a crippling defect.

Categorizing

The empirical categories (e.g. mental vs. physical information hurt) were created in a holistic manner. Their terms and definitions were discovered in the literature and/or data. With terms, already established ones were conventionally preferred, but when such categories did not seem to fit or could not be found in the literature at all, the data was drawn on. With definitions, however, it was the data which was the primary source. Only when a category was not lucidly defined by the informants was literature resorted to. It was rather common to arrive at a subconcept having a mix of both deductively and inductively derived categories. These classes were constructed in such a way that they were mutually exclusive.

Forming categories was not trouble-free, either. Firstly, it often occurred that a class manifested itself in the data just once. If the issue corresponding to this category came out unequivocally in the interviewee’s speech and contributed to comprehending the whole, it was subsumed as a type of its own. On the other hand, if the presence and utility of the class was doubtful, it was habitually merged in another genus. Secondly, determining the features of some classes was difficult, because there was so little data on them. The description of these types remained somewhat cursory. Thirdly, there was sometimes the problem of a category not having a single primary hit in the data. The value was manifest in the material, but as a secondary one only. However, it crossed my mind that absence may occasionally be as telling as presence. Hence, these classes were dealt with by including them in the variable analysis (with a frequency and percentage of zero), for they would help the reader understand the results better. Fourthly, if the interviewee expressed an idea nebulously or seemed to refer to more than one category in an absolutely even proportion, I had no choice but to give the variable the value of ”unknown”. In such a case, the matter was obscure to me, but not necessarily to the informant. For an obvious reason, the share of unknown values tended to be greater with variables that were not directly asked about in the interviews.

Analysing questionnaires

In the fourth and final phase of the analysis, the filled-in survey forms were utilized to furnish some information on the interviewees' background, their relationship with the supernatural, and their overall habits of seeking paranormal information. As this segment was not a part of the research problem proper, I deemed it adequate to merely enumerate the distributions of the pertinent variables. The perusal was slightly hampered by occasional missing responses, but this could not be helped any more.

4.5 Presenting findings

Results

In Miles' and Huberman's (1994, 11) view, the most perspicuous way to present abstractions of qualitative material is to exhibit them in "displays" — tables and figures. Since the research setting at hand is above all descriptive, mainly descriptive displays on the data were assembled. Table is the basic form of abstract presentation here. A figure was preferred only when it was more illustrative than a table, and when the values of the variables required no definition.

The 71 *tables* usually exhibit both qualitative and quantitative information. They were compiled according to the following principles. The definitions or characteristics of the variable values are given either with or without parentheses or brackets. Normal text denotes that that explanation can be regarded as a defining feature of the category, as it was frequently mentioned by more than one informant and/or was especially illustrative. An elucidation in parentheses ( ) normally signifies a supplementary aspect of the category, for it was pronounced by a solitary interviewee and thus was not so typical in the data. Words in brackets [ ] are my own comments on the "unknown" class. The values of the variables are always accompanied by their observed frequency *(f)* and percentage *(%)*. The percentages are excluded from some tables due to space restrictions. The values are generally presented in the declining order of their frequency, from top to bottom and, in some tables, from left to right. Since the number of observations was regularly under one hundred, and the analysis was grounded on qualitative material, the percentages are given as integers to which normal rounding rules were applied. The total percentage is invariably 100, even if the sum of all the individual rounded-off percentages is not exactly this. Some distributions are accompanied by their median value (Md_n). With correlations, the test measure and its level of significance are shown, as well.

The *figures* come in varied casts. Seven models portray concepts and categories, as well as their interrelationships. Four pie charts were built by adhering to roughly the same rules as with the tables. There are also two chronological flow charts and a bar chart which ought to be self-explanatory.

Each display is given a fair account of in the body text, with an eye to both qualitative and quantitative aspects of things. The sheer number of the tables might convey to one an impression of a quantitative treatment of the data, but this is just an illusion. Especially the descriptive tables are packed full of qualitative information all of which cannot be clarified in the main text. The distributions are mostly there to tell us something about the comparative frequency of the varied phenomena. The quantitative analyses serve to illustrate theory whose scrutiny is the chief task. The tables function as first-rate information compression tools under these circumstances in which there is so much to say, but so little space.

Examples

Every original (not derivative) variable and process category is illustrated by a concrete example from the interview data. All instances were rendered from Finnish. The names of the interviewees were changed to protect their identity. Information action is

exemplified by 126 text extracts and 56 chronological flow charts. These samples are embedded in the text on the findings. To facilitate unambiguous interpretation, they require some reading instructions. The directions apply to all empirical specimens in chapters 5 to 7.

There are many direct *citations* from the interviews which were translated word for word. The questions in *italics* are the interviewer's, that is, mine. Most proper names were replaced with a modified first letter to keep the statements confidential. A long dash (—) stands for an interruption and change in the course of the utterance. Three short dashes (---) mark one or more words that could not be made out from the speech. The code at the end of each quote refers to the participant and the text unit (≈sentence) number(s) in his/her interview from which the excerpt was taken. When a minor point is illustrated through an example, this is briefly paraphrased in the body text. The instance is supplemented by a reference that proclaims the interviewee (fake name), the process in the interview (numeral), and its specific stage.

A host of process examples are presented as *figures* which are generally read from top to bottom and from left to right, where the vertical axis represents time and the horizontal axis space. Each specimen depicts a complete perceived process of its type, but usually not the whole process. The illustrations comprise the following elements (Figure 4):

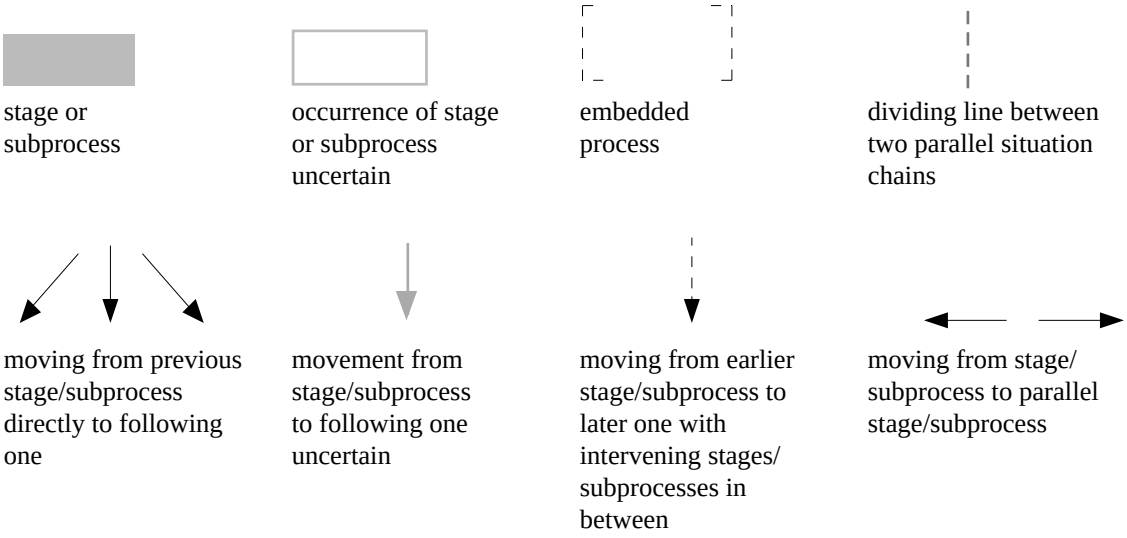

FIGURE 4. Process components

The instances of stages and subprocesses within the grey boxes (in Figure 4) reflect the researcher's notion of the gist of each particular or aggregated occurrence. A possible number after the type of stage/subprocess indicates its running number within the process example. An accompanying capital letter shows that the stage/subprocess is one part in a "serial" of its species. Different stages with an identical number/letter belong to the same subprocess. The source (interviewee) of every sample is displayed at the bottom, together with the name of the figure.

4.6 *NUD*IST*

Despite its name, *NUD*IST 4* is by no means a nude gallery, but a computer program for qualitative data analysis (see http://qsr.latrobe.edu.au/products/n4.html). The name is an abbreviation from "Non-numerical Unstructured Data Indexing Searching and Theorizing", so the program promises much. Indexing (coding) and searching the data worked well enough in spite of their mild clumsiness. It did not become clear to me, however, how theorizing within *NUD*IST* could be realized. I suppose a lot depends on whether one is capable of exploiting all the elegant features of the program.

I opted for *NUD*IST*, because it was (and still is) one of the most versatile and popular computer programs for qualitative data analysis on the market, and because it is available for both Macintosh and PC platforms. I myself use a Mac, but I considered it as important that the database would also be transferable to PC format if necessary.

4.7 Validity and reliability

The results of this piece of research can be estimated to be *valid* enough, although some issues do demand explication. According to J. Farradane (1979, 14), the interviewee's ”knowledge structure” changes when he is questioned. The interview speech was grounded on the participants' memory, because of which they might have told me a story that was slightly different from what had actually happened. Some older persons directly admitted that they could not recall some things for certain. I also noticed that processes which had taken place a long time ago or had been prolonged could not be often remembered in detail (see Kumpulainen 1993, 73). All in all, forgetfulness appeared to be a minuscule problem, though.

The researcher must necessarily interpret the interviewee's speech via his own knowledge (Farradane 1979, 14). Partially owing to this, care was taken that both the interviewee and interviewer (I) understood what the other one was saying. Throughout the empirical part of the study, and particularly during the coding, I saw to it that the participants' words would be distorted as little as possible. This demanded keeping my interpretations to the minimum. Thus the theoretical model was allowed to reflect the data, rather than vice versa. Yet, this practice could not guarantee that none of the variable values would be erroneous, for no confirmation of the validity of my understandings could be attained.

Assembling the processes rested on my shoulders: I reconstructed the courses of the events myself on the basis of the interview texts. The progressions were not checked with the informants, so they may be partially defective or even incorrect. This dilemma with reconstruction ails not only time-line interviewing, but also other data collection techniques that are used for the deep scanning of information seeking (Tuominen 1994, 73). In spite of these limitations, the findings of this work seem to bear sufficient resemblance to the reality of devotees of the paranormal.

Also the *reliability* of the results should be satisfactory, for all informants (except one; see above) were asked approximately the same questions in approximately the same form and order. What is more, an effort was made to retain the meaning of these queries as relatively constant. On the other hand, the interview data was not recoded either by the same or a different analyst in order to determine intra- or inter-coder reliability. What with the sheer amount of material and number of codes, such an undertaking would not have been practicable. Whenever the coding scheme was altered, however, the relevant coding was checked, too. In other words, the data was partially recoded, which raised the reliability at least to some extent.

4.8 Generalizability

Qualitative research methods have been criticized for their dependency on the context which has resulted in the seeming lack of validity and replicability of findings (Sonnenwald & Iivonen 1999, 430). The generalizability of the results herein is not necessarily very high, primarily because of the small sample and the moderately selective participant picking procedure. This means that the informants did not accurately represent the basic study population. However, I do think that the results based on the interviews are quite generalizable to the more knowledgeable and ”advanced” portion of this community. Likewise, the discoveries can be extended to similar people in countries similar to Finland — i.e. in European and North American lands. Nonetheless, the quantitative distributions cannot be so readily drawn such general conclusions from. For the foregoing reasons, it is not to be expected that the findings of this study could be closely replicated, either.

Then again, the aim of qualitative research is not to create universal laws, but to gain understandings of how things work in particular contexts. Nevertheless, in the background there is a notion that ”the specific reflects the general”. (Hirsjärvi *et al.* 1997, 181.) If this were not so, qualitative research could hardly be called scientific. As a matter of fact, one may argue that in a qualitative investigation, the key factor is not the magnitude or representativeness of the sample, but instead the generalizability of the theory that is constructed on the basis of the data. This is where the current study — with its model of information action — stands on firm ground.

5 Background for results

Prior to proceeding to the actual discoveries of the dissertation, the interviewees and their conceptions of the paranormal are introduced here as clarifying background information. The data on the study participants was harvested from the survey questionnaires (see section 4.2), whereas their views on the nature of paranormality are based on the interviews. In order to get help with decoding the empirical extracts, refer back to section 4.5.

5.1 Interviewees

The final group of study participants consisted of 16 people of whom ten (63 %) were women and six (38 %) were men. Their *age* varied between 23 and 77, the average (median) being 43 years[18]. The interviewees' age composition was as follows: four (27 %) of them were between 20 and 34, five (33 %) were from 35 to 49, three (20 %) were between 50 and 64, and three (20 %) were from 65 to 79 years old. The partakers' *level of education* was distributed rather evenly: six persons (38 %) had basic education, four (25 %) had an intermediate grade, and six (38 %) had a degree in higher education. The interviewees' *marital status* was as follows: nine (56 %) were married, four (25 %) were single, two (13 %) lived in cohabitation, and one (6 %) was a widow. There were no divorced people in this group. The interviewees represented various *socioeconomic statuses*: four (27 %) of them were pensioners, another four (27 %) were unemployed, two (13 %) were entrepreneurs, another two (13 %) were upper clerical workers, still other two (13 %) were workers, and one (7 %) was a student[19]. No lower clerical workers, conscripts, or housewives were present in the sample. The participants came from *localities* of almost all sizes: the smallest domicile had 2000 inhabitants, and the largest one had 187000 people, while the average (median) population was 53000. Only the Finnish capital of over half a million people was not represented.

The relationship of the interviewees with the supernatural varied. First, the *duration of familiarity* with the paranormal ranged from 5 to 60 years, and the average (median) stretch was 22 years[20]. Just barely the biggest group (four individuals, or 29 %) in this regard were those who had known about supernatural affairs for the shortest time — ten years at the maximum. The *number of acquaintances* with whom the partakers could discuss paranormal matters was zero people at the minimum, and 125 people at the maximum[21]. However, the average (median) was only four people. Almost all (13 or 93%) of the respondents reported having had one or more *paranormal experiences* of one kind or another at some point in their life[22]. Only one (7 %) stated that she had never perceived any supernatural phenomena.

Some opinions on the paranormal were also asked from the interviewees on the Likert scale (1-5). The *belief in paranormal phenomena* among the interviewees was, as a whole, very strong (14 or 88%). Just one (6 %) of them announced that she did not believe in supernature at all. However, this answer had to be based on a misunderstanding, because elsewhere in the blank, she professed "the holy trinity and Jesus Christ", and reported having witnessed varied paranormal incidents. Another (6 %) partaker could not assess her faith in supernatural phenomena. In a similar fashion, the personal *importance of the paranormal* was regarded as very high by 12 (75 %) respondents. Each of the remaining four values (1-4) was advocated by one (6 %) partaker. The *sensitivity of the paranormal* in society was considered as high or very

[18] N=15.
[19] N=15.
[20] N=14.
[21] N=14.
[22] N=14.

high by most (12 or 75%), although four (25 %) participants were of the opinion that the matter is of low or very low delicacy. On the average though, the supernatural was seen as a sensitive issue.

As far as seeking paranormal information in general is concerned, some observations are worth mentioning here. First of all, when inquired about the *context of information seeking*, 12 (86 %) participants replied that they usually need paranormal information mostly or solely outside of work[23]. Only two (14 %) people indicated that they need this information equally for work and outside work purposes, whereas none of the interviewees needed information of this kind more often at work than in their free time. The *motive for information seeking* was measured, among other things, along the dimension of spirituality. The reason for searching supernatural information ranged quite evenly from only spiritual to both spiritual and worldly motivations, so the average (median) incentive was more often a spiritual one[24]. Not a single participant declared that he ordinarily pursues paranormal information more for worldly reasons. The *frequency of seeking paranormal information* was quite high in this group, with 8 (53 %) people acquiring information of this kind every day, 10 (67 %) people seeking at least once a week, and 13 (87 %) people searching at least once per month[25]. Of the remaining two respondents, one acquired paranormal information a couple of times in a year, while the other resorted to this sort of information very rarely, not even on a yearly basis.

The demographics of the study participants look quite normal, so they appeared to be ordinary people on the surface. When we get to the territory of the paranormal, however, some striking regularities emerge. First, the informants had usually been knowledgeable about supernatural things for quite a long time. The second observation is that they had very few acquaintances with whom they could converse about paranormality. Third, almost all of them had experienced something which they deemed supernatural. Fourth, they had a firm belief in paranormal phenomena, which entitles one to call them ”supernaturalists”. Fifth, supernature was regarded as highly important by the interviewees. Sixth, the paranormal was reckoned as a delicate matter in society. Seventh, paranormal information was mostly needed outside work. Eighth, this information was more frequently wanted for spiritual rather than worldly causes. Ninth, supernatural information was sought quite often.

These observations point to the following conclusions: regular paranormalists are very much involved with the paranormal, but they see this as relating to the incorporeal rather than the corporeal world. They must stand relatively alone, for they seem unable to break the ”spell” of supernature as a taboo. On this basis, it may be speculated that casual or novice supernaturalists — not to mention unbelievers — are probably less involved and more alone, and consider the supernatural as an even more forbidden subject.

5.2 Normal versus paranormal

As was expected, the divide between the normal and the paranormal proved to be *the* focal point of the study, as far as the empirical side is concerned. There seemed to be a unanimity among the interviewees that phenomena called ”paranormal” or ”supernatural” exist, even to the point of their being taken for granted. The partakers also appeared to share at least a roughly common understanding of what these paranormal phenomena are from an objective or intersubjective point of view:

> ”And then I started to study books and --- got then everything which belongs to paranormal information: UFOs and in general this kind of paranormal phenomena.”
>
> *(Helena 6)*

For some, however, the concepts of normal and paranormal also had a personal meaning

[23] N=14.

[24] N=15.

[25] This is a cumulative frequency. N=15.

deviating from their more objective definitions. Three interviewees thought that the paranormal was actually normal to them, because the phenomena were a part of their life-world. In the following example, the unity of all things was also emphasized, which implied that there cannot be a distinction between normal and paranormal occurrences:

> ”And if supernatural experiences can include — this reiki therapy it may be such well which some see as supernatural in my opinion it’s natural that everything is energy the whole world, and there doesn’t exist that is in my opinion more than one energy and it’s this God precisely, this Love.”
>
> *(Dagmar 45)*

Two participants had been experiencing something that others would call supernatural all through their lives, so they had even had some difficulties in realizing the extraordinary nature of the phenomena. In their childhood, they could not separate their paranormal experiences from normal ones, because they regarded those events as the normal course of things. It was not until later that they learned from other people and literature that a part of their reality was not normal by others’ standards:

> ”But so, didn’t take a view of them back then as a child — I didn’t like know like that necessarily that these were this kind of supernatural experiences. To me these were quite natural things and not until later did I read — I always been interested in UFOs especially and other paranormal matters, phenomena and re— when I learnt to read I really read exc— almost exclusively this kind of literature and at first I felt, when I learnt to realize that they were supernatural things so I feel they were exciting stuff so I too want to experience. Although I have before experienced but I didn’t realize then that they were supernatural.”
>
> *(Ulla 255-257)*

There was one participant who brought up the topsy-turvy idea of some ”normal” things being actually paranormal:

> ”And an autist has this photographic memory. --- they don’t need to read a book. Just like that. They could simply browse like afterwards. And that’s in my opinion supernatural. Isn’t it rather a supernatural this kind of phenomenon that one has this kind of a huge photographic memory? It’s not something which an ordinary human being has.”
>
> *(Risto 319-325)*

Thus, the informants expressed different notions of what is normal and what is paranormal. The *objective* view, according to which supernature is something uncanny, was predominant. The *normalizing* idea says that everything is normal, including the paranormal. The *ignorant* conception, on the other hand, imports that the person cannot distinguish between normal and paranormal phenomena. Finally, the *paranormalizing* notion suggests that some normal things are actually paranormal, because they are so amazing. These viewpoints clearly show that the concept of paranormality is not seen in a monolithic way, but instead phenomena are given different meanings by different persons at different times. The senses may depend on how far the actor has advanced into the knowledge domain of supernature, how commonly he experiences phenomena of this sort, what kind of a position paranormality has in his life, and what other people think about the phenomena.

As interesting as scrutinizing these disparate points of view would be, the categorizations in the present study are based on the objective or intersubjective concept of supernature rather than on subjective ones. This is because the research was designed to enable the comparison of different cases of information action, which required a common framework. Personal interpretations are not forgotten, however, for these complement the more objective analysis.

6 Essence of information action

> ”So it like drew then this kinda ’do open the channels’ so during that time this took four and a half years like … I want dis connection. So this desire like for conta— for this kinda higher communication it like raises the level of consciousness and all the time like develops this kinda contact so that the channel opens then at some moment. […]
>
> Then […] these space contacts started to come. The first one was when I was still living with my parents here so a group of was it now four aliens came to my room on the energy plane. One was this kinda motherly figure of brilliant light who I named Light Being. I only saw her like face. Otherwise she merely shone with white light. Then there was that kinda two-metre mantoid-looking being. Then there was an about 150-centimetre ant-type creature, and then there was that kinda small brown baldheaded being. It was these party of four who like first appeared there in my pad and room and then explained that they come from the Joint Universal Alliance of the Primal Knowledge. […] They — these began then my space friends or this members of the Galactic Federation started like to tell me about Spiritual Science. […]
>
> So — well, if like I should clarify what sort of connections well I’ve usually had the — in the early days energetically they came here to be present in the same room where I from them channelled their knowledge and they represented telepathically to me that information but this was at the beginning. No longer do they no longer need to come there close because when they came near they amplified the connection.
>
> […] all the time in the course of these years has after that first meeting so my mission here has become clearer and clearer and this kinda co-operation with the space friends become clearer and clearer then what is in it and — that --- I’ve just got information about it that all these previous information, or following information always strengthens previously given information so that it’s more and more precise, so that they like little by little reveal this whole in it.”
>
> *(Ulla 136-143, 147-148, 165, 315-316, 445)*

Thus begins one fantastic and yet allegedly true-life voyage into the vast world of the Unknown. While the example definitely epitomizes an extreme case of information acquisition even in the present work, it nevertheless manages to convey what the piece of research at hand is about. In this and the next chapter, the results of the current interview study are described in detail. Categories, concepts, distributions and relationships are laid out, interpreted, as well as contrasted with earlier observations and views. Since information seeking or action in the context of the supernatural has not really been studied by others, my master’s thesis (Kari 1996; also Kari 1998b) is frequently drawn on as a point of comparison when the paranormal is concerned. In addition, research literature on information seeking and sense-making outside work or in general is exploited. Juxtaposing the findings of this investigation with those of Sense-Making was hampered somewhat, for as Kumpulainen (1993, 21) complains, the results of Sense-Making research have been published sparingly, at least in information studies. This first half of the findings treats of the content of information action.

6.1 Situations

Situation Movement States

Specific Situation Movement States

A total of 11 different Situation Movement States (SMSs) could be identified in the data: barrier, being led, dead end, decision, moving, observing, orienteering,

problematic, shifting, waiting, and worrying. These are clarified in Table 1. A *barrier* situation was about something or somebody arresting the individual's progress towards his goal. In this sample, the informant was supposed to prepare for a school examination, but more pressing things got in the way:

> "… well sometimes I've used it … for example when I went to an exam and I didn't prepa— remember to read, or I didn't have time to read, so I've meditated --- known, although I didn't read 'em."
>
> *(Dagmar 70)*

When the actor was *being led*, he was following another person along a figurative path. This category is illustrated by an instance in which the respondent was going to settle a cruel, previous-life deed of hers with a stranger, at her deceased husband's request, or so it seemed:

> "Well then I 'yeah it's my husband' — well he — and he is sending a message that I should contact … M and … well this person is involved this priest well he is the minister in M now, and it turned out that I some time centuries — perhaps millennia — ago well I've … been a man, and I've very brutally killed this person this priest, and my husband has been a child who has seen then he has been below the stairs watching it … and now I should go to clear up then and to discuss with him so that we would get it like — it done with and I don't know more about it then I haven't discussed this with anyone but I would assume that in order to settle the heritage which comes in reincarnation … so that this pressure wouldn't continue … so I assumed — it wasn't said directly but — because my husband maybe wanted to contact me from beyond, so he apparently like was — saw me like … as a murderer, and because of it between us there was some … thing that we didn't completely open to each other, so I would assume that for this reason I should now go to discuss then with this person."
>
> *(Jenni 40)*

In a *dead end*, the individual could not proceed with his journey, since he reached the end of the road. For example, one of the interviewees felt that she could not live any more:

> "I gave up somehow so I suppose I didn't like think about anythin' but like … I like gave up and I like … I guess I also thought about death then somethin' here that is. Not actively like I go and hang myself or somethin' like that, but in some way so that I couldn't like live. I got the feeling that 'now I can't go on any longer with this business' that all are awful all people. So I really had this kind of bad negative thoughts, although they weren't clear no clear thought, nothing coherent. But a total depression."
>
> *(Dagmar 557-562)*

When facing a *decision*, the protagonist came to a cross-roads at which he had to choose one avenue to walk. In this extract, the partaker had two options as to resolving the situation:

> "So … two possibilities: either make violent decisions or let time take care. […] It can be resolved violently or peaceably depending on the parties' ---."
>
> *(Sampo 52, 71)*

Moving implied that the actor was free to approach his destination. As a case in point, one of the participants was going home, filled with happiness:

> "I'd been with the dog in a forest and then well … it was in fact already spring, late winter so that ice started to be like --- that it wasn't quite reliable. I decided … to take a shortcut across the ice, and the dog went in front. I was in quite a good mood, really happy that everything was beautiful and the sun was shining and being with the dog was wonderful and well … such a good mood."
>
> *(Dagmar 402-404)*

Observing meant that the individual was not concerned about getting anywhere, but just

wanted to monitor the circumstances. The only time this happened was when an interviewee's husband recovered from a disease, and she apparently kept an eye on him in case his condition got worse again:

> *"Did they stop then altogether these [seizures]?"*
> "Yes, yes they did and here one must wonder at it a great deal, that accord to like them [doctors] those seizures should come although this medication is on. This is like most marvellous of all."
> *(Cecilia 47-49)*

If the situation was reckoned as *orienteering*, the person was searching for a way to his objective, or the target itself. The following example, in which the subject aspired to experience supernatural phenomena, but did not quite know how to attain them, reflects the first mentioned position:

> "Well, since small always been interested in this kinda paranormal things, phenomena, experiences and phenomena and contacts. And when I learned to read, I to this— read awful lot of this kinda literature so I too want to experience them somethin' that oth— that was tol— written. It's this which has always been interesting to me somehow."
> *(Ulla 319-322)*

In a *problematic* situation, the individual was dragged down a road not of his own accord. The plight could even involve nightmarish features, like in this case:

> "I was for this reason every night afraid of the time when I — because I was always woken up then by some weird sound, and it was like whale's whistling. That was the most horrible thing about it. And then although I couldn't hear the sound any more well I woke up every night and I was awfully afraid at that time always. … And then I can remember that I — all kinds of prayers every night at that time I started — I came up with all sorts of prayers like 'Jesus Christ help' so it was really terrible. If one experiences shocks like that then …"
> *(Gaia 208-212)*

The situation was called *shifting* when the doer wished to switch over to another track from the current one. An exemplar of this is changing one's job:

> "Such a situation arose — it could be said that a career change was in mind. It came — it was such a very one could say tricky situation."
> *(Cecilia 279-280)*

Waiting signified that the actor was looking forward to a certain happening, such as becoming a healer:

> "Of course it would be like it would be as soon as … possible but … it doesn't go like that. There's no actual — it comes when it comes if it comes."
> *(Helena 95-96)*

While *worrying*, the person was unsure of whether he could arrive at his destination. For instance, the informant could fret over his projected appearance in public:

> "Or … it was a --- uninhibited feeling — or after that I was under such a — of course slight stress that how will I begin to open the parcel, begin to tell people, but it's not any longer these days. Of course I was a bit nervous at first about how I would like start to tell the general public about it."
> *(Paavo 99-100)*

TABLE 1. Specific Situation Movement States (SMSs) and their properties (n=47)

*Specific SMS**	*Characteristics**	*f*	*%*
Orienteering[a]	•looking for a way to destination or destination itself •searching for something new •drive comes from within (•experimenting with something)	12	26
Problematic[b,f,g]	•being on a road against one's own will •caused by another person or circumstance •negative feelings (•the matter must be sorted out) (•someone else's dilemma, but individual is dragged along) (•being dominated by another)	7	15
Being led[b]	•following another towards destination •in accordance with individual's desires (•task to accomplish or duty to fulfil) (•going with the stream) (•person taken advantage of)	5	11
Worrying[c]	•reaching destination uncertain (•route unclear) (•being influenced by others) (•pressure) (•dangers)	5	11
Moving[b]	•free movement towards destination •destination and route there known •other people have no effect (•no destination or plan to get there at all) (•due to ignorance or neglect)	4	9
Waiting[b]	•expecting a particular event (•uncertainty)	4	9
Barrier[b,c,f,g]	•someone/something blocking the way •destination known	3	6
Dead end[a,d]	•road leads nowhere •impossible to continue (•strong negative emotions) (•giving up)	3	6
Shifting[e]	•shifting to another road •because of inner compulsion or rising of opportunity (•problematic) (•destination known)	2	4
Decision[b,c,f,g]	•resolving which way to go from a crossroads	1	2
Observing[b,c]	•monitoring surroundings •movement unimportant	1	2
Total		47	100

* Following the theory of Sense-Making, these categories are represented in a partially metaphoric guise.
[a] Source: Perttula 1993, 68.
[b] Source: Dervin 1983b, 61.
[c] Source: Johnson 1996, 144.
[d] Combination of Dervin's (1983b, 61; 1992, 75) "spin-out" and "wash-out".
[e] Source: Perttula 1993, 69.
[f] Source: Dervin 1991, 67.
[g] Source: Dervin 1992, 75.

None of the categories above is novel, but they do represent a rather comprehensive array of SMSs. Only Dervin's (1983b, 61) "out to lunch" and "passing time" were not present. As a matter of fact, I have not seen these in any other empirical study, either.

The characterizations of many SMSs — being led, dead end, moving, problematic, and shifting — in the study at hand add something to previous elucidations. The central features of two classes diverge from earlier conceptions. When *orienteering,* the individual does not always know his destination (cf. Perttula 1993, 68). In a *worry* situation, on the other hand, the person does seem to be aware of his goal (cf. Johnson 1996, 144), but he is haunted by the uncertainty of reaching it. As the SMSs are fairly established by now, it would be perfectly justified to examine them deductively by requesting the respondents to choose a situation category rather than have them freely describe the situation. This has in fact been done for quite some time in Sense-Making research. Because of the large number of categories under SMS, I decided to devise another typology at a higher level of abstraction. Therefore the classes presented in Table 1 were named ”specific” SMSs, and those in Table 2 ”generic” SMSs.

Judging by Table 1, orienteering was by far the most common type of situation, occurring in every fourth instance, while decision and observing were the rarest types, each manifesting but once. The distribution differs markedly from that of Kumpulainen’s (1993, 40) and Tuominen’s (1992a, 47). For instance, orienteering was not manifest in these studies at all, as this type was not introduced until 1993 by Perttula (1993, 68). Also, decision was a considerably less conventional situation here than in those two investigations. The discrepancies may be explained by the assortment of categories used or the general context of action examined. In any case, the findings appear to indicate that information action connected to the paranormal occurs first and foremost in seeking something new — unacquainted people or organizations, novelties in the world, unfamiliar objects, new phenomena, supernatural experiences or talents, etc.

Generic Situation Movement States

Dervin (1983b, 15) insists that all the various Situation Movement States illustrate different ways in which the actor sees his movement as halting. The assumption may be called into question, for only some of them in actuality imply stopping. This is also insinuated by the words ”movement state” themselves. In her master’s thesis, Perttula (1993, 67) classified situations according to the degree of metaphorical motion in time-space, according to whether the person conceives his movement on the road as free, difficult or stopped. In my study, ”difficult” was replaced with ”restricted” in order to more accurately convey the nature of this sort of movement. Moreover, one brand-new type was discovered: wrong way.

In Table 2, the 11 specific SMSs have been aggregated under four more general ones: free, restricted, stopped, and wrong way. A *free* situation means that the actor was uninhibited to move towards his destination. This was the ”easiest” one of the situation types. In a *restricted* situation, the person was able to move in the direction of his goal, but something was slowing him down. When in a *stopped* situation, the individual was at least temporarily prevented from getting on with his journey to the destination. Finally, being on a *wrong way* signifies that the actor was in fact moving away from his target, in another direction not of his choice. It is not hard to imagine that a position of this sort was usually the least comfortable. In practice, wrong way refers to a problematic situation.

The present classification of the specific SMSs is only half the same as Perttula’s. She reckons that in a barrier or problematic situation, the person’s movement just becomes more onerous. (ibid.) This study suggests otherwise. A barrier situation actually stops the actor’s onward movement, at least temporarily. If it did not, one would probably be talking about a worrying situation. The problematic situation was already discussed above. On the other hand, Perttula (ibid.) asserts that orienteering and shifting exhibit free motion. In view of the instances in this investigation, these situation categories rather belong to restricted circumstances, for the informants’ advance was not that straightforward. More research is needed, however, to determine whether the aggregation of the specific SMSs under the generic ones holds good, or whether the freedom of movement is a dimension of its own.

TABLE 2. Generic Situation Movement States (SMSs) and their constituent specific SMSs (n=47)

*Generic SMS**	*f*	*%*	*Specific SMSs**	*f*	*%*
Restricted**	24	51	Orienteering	12	26
			Being led	5	11
			Worrying	5	11
			Shifting	2	4
Stopped**	12	26	Waiting	4	9
			Barrier	3	6
			Dead end	3	6
			Decision	1	2
			Observing	1	2
Wrong way	7	15	Problematic	7	15
Free**	4	9	Moving	4	9
Total	47	100		47	100

* Following the theory of Sense-Making, these categories are represented in a partially metaphoric guise.
** Source: Perttula 1993, 66-67.

Restricted situations arose most often, in as many as half of the cases (see Table 2). The smallest group were free conditions which represented only one eleventh of all situations. This illustrates how uncommon it appears to be to seek paranormal information in free circumstances.

Basic Situation Movement States

The aforementioned four-class typology seemed valid and exhaustive, but it was still possible to distil the categories into types of even higher abstraction. Thus was born ”basic” Situation Movement State, consisting of merely two kinds: advancing and blocked (in Table 3). In an *advancing* situation, the person was able to approach his goal, whereas when being *blocked*, he could not proceed toward it. Advancing situations are composed of free and restricted SMSs, and blocked situations incorporate stopped and wrong way ones. This dichotomy offers the supreme level of abstractness for SMSs. Almost two thirds of the situations were advancing, and the remaining situations were blocked.

TABLE 3. Basic Situation Movement States (SMSs) and their constituent generic and specific SMSs (n=47)

*Basic SMS**	*f*	*%*	*Generic SMSs**	*f*	*%*	*Specific SMSs**	*f*	*%*
Advancing	28	60	Restricted	24	51	Orienteering	12	26
						Being led	5	11
						Worrying	5	11
						Shifting	2	4
			Free	4	9	Moving	4	9
Blocked	19	40	Stopped	12	26	Waiting	4	9
						Barrier	3	6
						Dead end	3	6
						Decision	1	2
						Observing	1	2
			Wrong way	7	15	Problematic	7	15
Total	47	100		47	100		47	100

* Following the theory of Sense-Making, these categories are represented in a partially metaphoric guise.

* * *

During the analysis, it gradually became apparent what Situation Movement State really means. It is not just about temporal-spatial motion (as a metaphor), let alone about the way of stopping. It may be asserted that SMS is the totality of the relationship between the actor's destination and the conditions on the road which he perceives as affecting his progression at a particular point in the process. This whole can be conceptualized as a state of movement that may be something else than coming to a halt.

Motives for action

Generic motives

In the past, there has been a tendency to view the motivations for seeking information as binary opposites. Thus, we have seen antithetical expressions of this pair of motives employed in the literature — including interest vs. concern (Wilson 1977, 43-45), learning vs. problem-solving (Kari 1996, 51), intrinsic vs. instrumental information seeking (Sarlund 1991, 46), and orienting vs. practical information seeking (Savolainen 1995a, 18-19; Savolainen 1999b, 78, 81, 100, 106). In the final analysis, all these couples refer to the dichotomy of (mental) reflection and (physical) action. It may be conjectured that both motives can incite the person to hunt for information. If this is so, the still prevailing infatuation for researching information seeking in the service of problem resolution only is perplexing. To take an example, Belkin and Vickery (1985, 18) profess that since the 1960's, research has systematically indicated that information behaviour stems from a problem situation faced by the individual (see also Bruce 1997, 320, 324, 327; Schamber 2000, 734).

Yet, this study revealed that there are not one or two, but four different generic motives for information action: change, interest, maintenance and problem (see Table 4). *Change* refers to the actor's desire to transform something. The next specimen deals with the interviewee's spiritual development:

> "Yeah no well I've for example — I have inquired like I left my good job because of feeling all the time that my spiritual growth will stop there if I have to make a product in which I don't believe myself. So I have like now then — in a way I had to do it internally, and leave the so-

called this kind of respected occupation, and well then I've anyway like asked then one LS and some like clairvoyants if like … I'm doing the right thing or what would now happen to me or — I've got so much energy that I don't like have — it would seem like this life is so short that there's no time to waste, but when is the new job coming."

(Marjo 114-115)

TABLE 4. Generic motives for action and their properties (n=47)

Generic motive	*Properties*	*f*	*%*
Problem*	•solving predicament •negative emotions (•may not be regarded as problematic or difficult) (•anxiety) (•searching for help) (•may be continuous or recurring) (•has to be dealt with) (•may be another's)	21	45
Change*	•desire for transformation •alone or in co-operation with others •inner drive or assignment from "above" (•may be about changing others or environment) (•may be long-term or even endless) (•creating new) (•development) (•positive feelings) (•may be desire to experiment) (•own goals) (•no deadline) (•giving up old things) (•may be difficult, but not a problem) (•may be systematic)	15	32
Interest*/**	•being intrigued by something (•curiosity: knowing as goal) (•studying something) (•no plans) (•contemplation) (•positive sentiments) (•no hurry) (•perhaps for no particular reason) (•long-term)	10	21
Maintenance	•performing routine task •preventing problems (•repeating) (•may be commissioned by another) (•may even invoke positive emotions)	1	2
Total		47	100

* Source: Savolainen 1999b, 101. ** Source: Wilson 1977, 43-45.

Interest means that the individual was curious about something and wished to know more about it, often for no particular purpose. This participant got keen on paranormal things:

"No, the interest was awakened indeed already in the summer, so there didn't like exist any such

> thing, any reason, any specific reason to search for the information so I just happened to get for some reason interested in like …"
>
> *(Gaia 265)*

Maintenance, on the other hand, denotes taking care of a routine task in order to sustain something. Such activity could entail handing out leaflets, for example:

> "Likewise about I&U Fair I got somewhere — I can't remember where — I got a big bundle of I&U Fair brochures. I distributed them all over M. So I've got these for the association different — brochures. These I hand out all over M and so forth — inform so this is like this kind of task also in my association."
>
> *(Ulla 890-893)*

Finally, *problem* signifies that the individual tried to find a solution to a dilemma. For instance, this could mean endeavouring to save the life of another person in mortal danger:

> "This isn't of course quite smart to without the other's knowledge go and do, but — or I felt that the situation was so desperate somehow it was continuous that --- in hospital and seizures always came."
>
> *(Cecilia 42)*

It is perhaps of consequence to note that all of these motives insinuate taking action. Problem as a motive was not necessarily the same as problematic situation as a Situation Movement State. It appears that a problematic situation always involved a problem, but a problem could emerge in almost any kind of SMS. This implies that the general conception of problem is broader than the kindred category in Sense-Making.

Table 4 divulges that by accounting for nearly half of the situations, a problem was the number one motive for taking action. At the other end of the scale, only one situation was about maintenance. This finding is at variance with that of my master's thesis (Kari 1996, 99; also Kari 1998b, 31, 36) which ascertained that searching for supernatural information is chiefly provoked by interest. These disparate results can be reconciled by suggesting that habitual information seeking on the paranormal may be more geared to satisfying one's interest, whereas situation-specific, acute searching could be more tied up with problem-solving.

Basic motives

The motives put forth above were dubbed "generic", because they could be conceptualized in a more basic way, as in Table 5. This higher-level typology revolves around the idea of whether the motive is external or internal to the actor. *External* motives were factors in the person's environment that caused him to take action, while *internal* motives were incentives which welled forth from somewhere within the individual. The antithesis does not denote that there would in effect be two separate worlds — inside and outside of the person — but rather that both the actor and his environment are different aspects of the same reality. Maintenance and problem were included in the external motives, and change and interest belonged to the internal motivations. It is certainly imaginable that a problem or a need to maintain something could sometimes be born from the individual himself, or that a change might be demanded by his surroundings (see Savolainen 1999b, 101), but these eventualities did not come into being in the present study. Motives for information action have not been analysed at such a high level of abstraction before.

All in all, there were slightly more situations with an internal motive than with an external one. Notice (in Table 5) how a problem was no longer such a prevalent motivation at this scale, as compared to its position among the generic motives in Table 4. Suvi Perttula (1994, 41), however, asserts that the process of information seeking usually takes rise in an external impulse. It could be that seeking paranormal information is especially resorted to in addressing one's own desires. Or, Perttula's

claim might be grounded upon a behaviourist fallacy.

TABLE 5. Basic motives for action and their component generic motives (n=47)

Basic motive	*f*	*%*	*Generic motives*	*f*	*%*
Internal	25	53	Change	15	32
			Interest	10	21
External	22	47	Problem	21	45
			Maintenance	1	2
Total	47	100		47	100

Paranormality of situations

Along the dimension of paranormality, the situations were classified as reportedly normal, paranormal or undecided (see Table 6). A *normal* situation was void of all that is deemed supernatural. An example could be a man and woman going together:

> *"Did you have … before this any plans to start a family?"*
> "Not indeed and at least not with this man that is I don't have yet very the relationship was brand new, and well … of course I had in theory thought about it like something which one thinks like that so there weren't like practical plans of any kind so this came like in a way as a surprise 'is this the man then?', […] so I hadn't planned it."
>
> *(Dagmar 332-333)*

A situation considered as *paranormal* was one in which something paranormal either had happened, was happening, or was expected to happen. The first, often one-time occurrence can be illustrated by a case in which the informant felt that her mind had been affected by extraterrestrials so that she had become interested in spiritual matters:

> "So it was quite spontaneous of me that I didn't even like think that … I could be influenced my brain by some outside being so that I'd get interested in these things. So this is how it's happened in my opinion."
> *"That somebody has affected?"*
> "Uh-huh, that these others have influenced that I've began to get interested […]"
>
> *(Gaia 185-188)*

The second, usually recurring circumstance is exemplified by a half-year situation during which the interviewee had regularly seen angels and other strange beings in a state between sleeping and waking at night:

> "[…] at that time there were all kinds of strange … such … dreams between … sleeping and waking nothing — whatever one would call this state so in such a state it happened so one already learns a lot that … like some human beings like I thought walked there but nobody was walking at home. So then such — incidents like that were involved during the half a year. It was rather scary time that … once I saw well — I saw such — well such — whatever angel it can be as it had such a brilliant, long brilliant golden and green cloak and well … such a thing was shown for half a year it came then I was afraid every night … after that."
>
> *(Gaia 133-135)*

The third, not-yet-happening instance can be elucidated by a project in which the actor pursued constructing a mind-reading device:

> "Well the second apparatus would be like this which reads thoughts, human thoughts. So wild. I've just thought about it if it'd be worth constructing … still, even if I got it — now I'm at this

moment still in the state that I can't do it."

(Risto 272-274)

The timing of the supernatural experience(s) in relation to the situation has not been studied before. It is true, however, that this discovery is akin to the more general Sense-Making concept of "distance into situation" by which Dervin (1983b, 60) means whether the person at a given moment feels that he is "at beginning, middle, or end of total situation". In the area of paranormal phenomena, one may think that when strange things have happened before, the individual is at the finish of the situation. If, on the other hand, he is at the time having supernatural sensations, he is at the heart of the situation. When he is only wishful (or fearful) of getting his share of paranormal experiences, he is at the start of the situation.

In an *undecided* situation, its paranormality could not be determined, because even the interviewee was not sure of the matter. A sample of this would be a situation in which the participant's husband had had a severe heart problem that had suddenly vanished. She could not understand how this was possible:

"Something happened there which even I don't understand, that also the doctor wondered that these seizures stopped, that like in their opinion they should've continued, but in spite of the medication these seizures."

(Cecilia 35)

Of these three classes, natural and supernatural situations already figured in my graduate thesis (Kari 1996, 98; see also Kari 1998b, 31-32), but the unclear one is a new species. Perceived paranormality is an aspect of situation which has been overlooked in the past.

TABLE 6. Paranormality of situations, and meaning of categories (n=47)

Paranormality	*Meaning*	*f*	*%*
Normal	nothing paranormal in situation	27	57
Paranormal	something paranormal has, is, or is expected to happen in situation	19	40
Undecided	paranormality of situation uncertain	1	2
Total		47	100

As Table 6 reports, well over half of the situations were perceived as normal, and more than a third of them as paranormal in some respect. The finding is in line with that of the first investigation (see Kari 1996, 98-99; also Kari 1998b, 36). The paranormality of just one situation was undecided, so such circumstances are seemingly exceptional.

A dependency

There seemed to be a moderately strong relationship between the *basic motive* for action and *basic SMS* (see Table 7): when the motivation was internal, the interviewees were usually in an advancing situation. However, if the motive was external instead, it was more common to be in a blocked situation. A plausible — albeit unverified — explanation for this regularity is that while the person is pursuing a goal of his own, he may well have a sense of freedom and headway, even if he experiences temporary setbacks. On the other hand, having to do something not of one's own accord could give rise to feelings of constraint and stoppage, as the individual is prevented from fulfilling himself. In this view, the actor's defining the situation might be partially dependent on his motivation, i.e. his attitude towards the task. If this is true, the finding is probably a

universal one.

TABLE 7. Basic motive for action vs. basic Situation Movement State* (n=47)

	Basic motive					
	Internal		External		Total	
Basic SMS	f	%	f	%	f	%
Advancing	21	84	7	32	28	60
Blocked	4	16	15	68	19	40
Total	25	100	22	100	47	100

* $\phi = 0.53$, $p<.001$.

Other observations

It is worth mentioning that in this study, information action taking place in work contexts was not mentioned at all, even though the inquiry was in no way confined to the participants' spare time. Two informants had been in a situation which dealt with keeping or changing their job, but nobody said that they had engaged in seeking paranormal information to facilitate task performance at work. This is mainly in accordance with the respective finding in my master's thesis (Kari 1996, 98; also Kari 1998b, 31, 36), although in that piece of research, work was not free from searching information about the supernatural. In earlier studies of information behaviour, too, it was discovered that information seeking situations usually come up "outside of work" (Chen & Hernon 1982, 17-18). Thus, the context of the paranormal is not that different from others in terms of information action, albeit here occupational information seeking seems to be even less common than on the average. This might be attributed to social constraints imposed by the work community and society at large. On the other hand, there are not too many jobs in which paranormal information is a requisite. It is likely that seeking this sort of information at work is only important for those whose vocation concerns the supernatural, like journalists and therapists in the field.

Since seeking supernatural information in the occupational milieu seems to be something truly special, it could be important and fruitful to peruse this phenomenon explicitly. With normal information action, it is quite the opposite: so-called leisure time ought to be probed much more deeply than so far from the perspective of informational phenomena.

Summary

The situation was conceptualized as Situation Movement State, motive for action, and paranormality of situation. Altogether 47 situations were included in the analysis. Figure 5 shows a bare-bones abstraction of this first stage of information action:

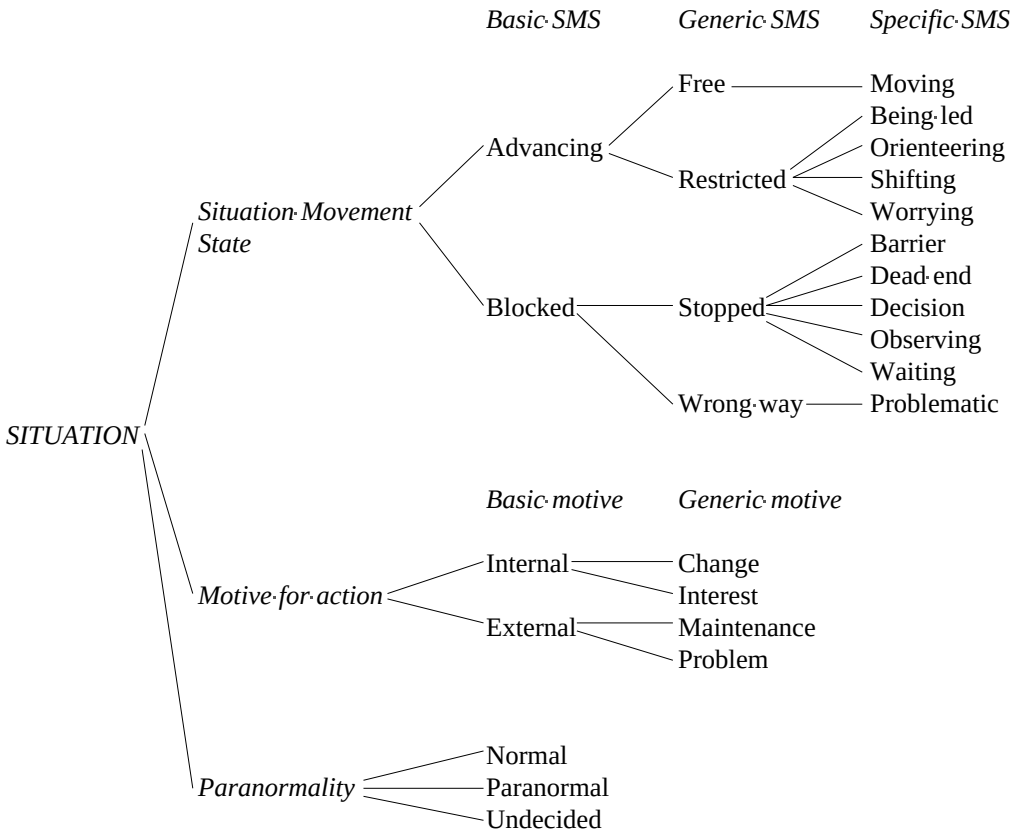

FIGURE 5. Conceptual taxonomy of situations

6.2 Information needs

Topics of needs

Paranormality

No general subject classification has been developed for researching information seeking, because topic categories always depend on the study object. A general library classification scheme might do in subject-free research, but not in this study. Here, the topic classes could not be grounded on anything else but the supernatural. Hence, the themes of the needs were first divided according to their perceived paranormality, into normal and paranormal subjects. A need with a predominantly *normal* topic was about something that was considered as completely normal, like ”work”:

> ”I’d like to start then studying like the field of mental health, at least like to see a little bit what this occupation would appear and I began then these … nursing studies … and now I’m like gonna then specialize in this mental health, crisis and intoxicant work.”
>
> *(Gaia 240)*

A need on a chiefly *paranormal* topic, in its turn, referred to something seen as supernatural, such as paranormal experiences:

> ”I always known that when one experiences it like this these this kind of that they are real, they have experienced, that I want to experience and I also — that is … that time at some point such a starting point there that since also others experience these then there has to be some such a background mechanism wh— it based on something why they experience this that what is it based on and with this it began like this kind of research interest and perhaps back then four and a half years before this ’94 occurrence … started to get like this interested as well.”

(Ulla 323)

Then there were *unknown* topics whose paranormality was impossible to specify due to the ambiguity of the informants' statements:

> ”There was nothing else to it. Is there something like that? Can it be done?”
>
> *(Cecilia 110-112)*

Figure 6 illustrates the shares of topics in regard to paranormality. From it, we can see that a little over half of the needs were about a normal topic, and less than a half about a paranormal topic. Two information needs could not be placed in either category, and thus remained unknown.

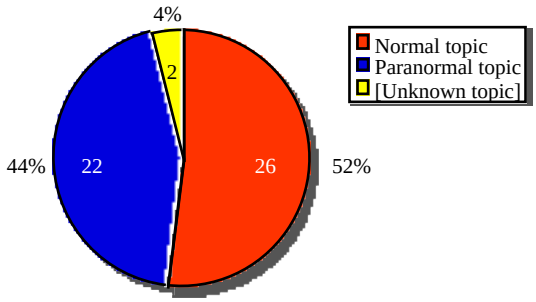

FIGURE 6. Paranormality of topics of needs (n=50)

Normal topics

The needs with a primarily normal content were subdivided into 18 topics, from ”action” to ”work” (in Table 8). ”People” was the most popular subject with its share of one fourth, followed by ”work” with a share of one fifth of the normal topics. The themes ”love”, ”mind”, ”organizations”, ”reality” and ”traffic” were mentioned least often, and even then as secondary topics only. The subject of one information need was left unclear.

TABLE 8. Normal topics of needs (n=26)

Normal topic	*f**	*%*
People	7	27
Work	5	19
Attitudes	2	8
Informing	2	8
Action	1	4
Contact information	1	4
Death	1	4
Health	1	4
Helping	1	4
Leisure	1	4
Medicine	1	4
Money	1	4
Symbols	1	4
Love	0	0
Mind	0	0
Organizations	0	0
Reality	0	0
Traffic	0	0
[Unknown]	1	4
Total	26	100

* A zero (0) indicates that the category was mentioned as a secondary one only.

Generic paranormal topics

The category of paranormal topics was further elaborated, so that its generic themes could be made out. The topics were split into four groups that are in general use: paranormal information, paraphysical phenomena, parapsychic phenomena, and occultism (see Table 9). ”Paranormal information” means that answers were needed to questions about *information*, not phenomena per se. This assortment is more limited than in my former investigation (see Kari 1996, 100-101). Due to the small number of information needs perused, the typology is indeed far from exhaustive (cf. ibid., 82, 185-187).

As Table 9 indicates, ”paraphysical phenomena” was absolutely the commonest one of these topics, accounting for a whole two thirds of all paranormal subjects. In fact, the other three subtopics seemed to be of a diminutive importance in its shadow. What is

more, ”occultism” was a primary theme in none of the cases. Topics of an unknown paranormal identity were four in number, which was nearly one fifth of all paranormal subjects. Therefore, this distribution is to be treated with caution. Nevertheless, checking these frequencies against those in my graduate thesis can provide a measure of substantiation. In both pieces of research, ”paraphysical phenomena” was the most usual paranormal topic (see Kari 1996, 100-101; Kari 1998b, 32). In this study, ”occultism” was not a primary subject at all, whereas in the other one, this topic ranked second among the supernatural themes (Kari 1996, 100-101; Kari 1998b, 32). At least it is obvious that ”paraphysical phenomena” is the most popular generic paranormal topic of needs. It is curious, though, why so little information is wanted about ”parapsychic phenomena” which is, after all, a related subject.

TABLE 9. Generic paranormal topics of needs and their definitions (n=22)

*Generic paranormal topic**	*Definition***	*f****	*%*
Paraphysical phenomena	•paranormal phenomena having physical qualities or effects*****	15	68
Paranormal information	•information about the paranormal, or information acquired by paranormal means or from paranormal source	2	9
Parapsychic phenomena	•paranormal phenomena based on consciousness*****	1	5
Occultism	•esoteric belief systems and practices involving the supernatural without perceived occurrence of paranormal phenomena	0	0
[Unknown]	[paranormal topic unclear]	4	18
Total		22	100

* Source: Kari 1996, 82, 185-186.
** These are not based on the empirical data per se, but on the large body of literature about the paranormal.
*** A zero (0) indicates that the category was mentioned as a secondary one only.
**** See Kiviniemi 1998, 34.

Specific paranormal topics

In order to facilitate understanding what the generic topics signify in practice, it was useful to analyse them in more detail. The result was Table 10 in which twelve specific themes are listed. It shows that of the individual topics, ”UFOs and extraterrestrials” was mentioned most often, in almost every fourth case. Least often, the theme of a need was ”dreams”, ”fortune-telling”, or ”inexplicable marks” which were only secondary subjects. As with the generic paranormal topics, these figures may be erroneous, owing to the high proportion of ”unknown” subjects. If both normal and paranormal topics are looked at together, ”people” was the theme on which information was needed most frequently, followed by both ”work” and ”UFOs and extraterrestrials”.

TABLE 10. Generic paranormal topics of needs and their specific component topics (n=22)

Generic paranormal topic	*f**	*%*	*Specific paranormal topics*	*f**	*%*
Paraphysical phenomena	15	68	UFOs and extraterrestrials	5	23
			Unidentified phenomena	3	14
			Objects other than UFOs	2	9
			Spirits and world of spirits	2	9
			Healing	1	5
			Beings other than ETs** or spirits	1	5
			Past lives	1	5
			Inexplicable marks	0	0
Paranormal information	2	9	Paranormal information	2	9
Parapsychic phenomena	1	5	Hearing voices	1	5
			Dreams	0	0
Occultism	0	0	Fortune-telling	0	0
[Unknown]	4	18	[Unknown]	4	18
Total	22	100		22	100

* A zero (0) indicates that the category was mentioned as a secondary one only. ** ”ETs” = extraterrestrials.

* * *

The analysis gave support to an earlier speculation that an information need may be about more than one topic (see Saracevic *et al*. 1988, 166). As a matter of fact, it was rather unusual for a need to focus on a single subject. However, only the primary topic was counted in the quantitative examinations.

10W Foci

This subconcept refers to the questions that people pose to either themselves or others. Its name was changed from ”5W Focus” into ”10W Focus”, because the data suggested ten Foci instead of five.

Specific 10W Foci

Questions have from of old been divided into five types: hoW, What, When/where, Who and Why (Dervin *et al.* 1982, 431). However, I separated ”When/where” into two different classes — When and Where — as Dervin (1983b, 16, 62) does in another paper. In addition, this investigation revealed four novel varieties of enquiry: hoW much, What kind, Whether, and Which. These developments gave birth to the renovated term ”10W Focus”. Hence, a host of ten question types were manifest in the data: hoW, hoW much, What, What kind, When, Where, Whether, Which, Who, and Why (see Table 11). Each of these queries is illuminated here by an empirical sample. The respondent could ask herself, for example, *how* it is possible that a spiritual being turns visible to the eye:

> ”So how is like some Indian guru who led him … to this kind of experience of the astral world able to appear in the man’s room so I didn’t understand this at all back then.”
>
> *(Gaia 405)*

Then again, the interviewee could be curious about *how many* people belonged to an association:

”I haven’t yet studied this membership that how many there are of them in this so could chart their —”

(Ulla 870)

One partaker wanted to know *what* an alternative therapist would infer from her eye:

”Yeah I visited I&U Fair just out of curiosity to ask what ---, what she saw from that […]”

(Laura 358)

In the following excerpt, the informant entertained questions such as *what* space people are *like,* and *what kind* of capabilities they have:

”Well, when I once met about three years ago space friends absolutely physically, absolutely on the physical plane, I got to shake hands with them and talk to them and I became interested of course more in where like they come from and what they are like and how they behave and what kind of so-called supernatural abilities they have and … so forth.”

(Paavo 14)

When would she lose her job, pondered one of the respondents:

”As far as I can remember I asked — of course I said where I am and who I am and I said where I — what my occupation is, and … as far as I can remember I said that well … did I say ’how long can we stay in this workplace’ or somethin’ in that vein, that there’s — did I say somethin’ — it may be --- lead it … that there’s information or something that there are rumours that we have to leave the place of work, so I didn’t as far as I can remember say in such a way that — But at that stage I guess we didn’t know about this completely.”

(Cecilia 636)

Another individual wondered *where* an optical occurrence originated from:

”Needed like to know where the light phenomenon came from and …”

(Kalle 172)

This interviewee had to find out *whether* her old money was any good at that time:

”First thing in the morning I called and asked whether one can any longer buy anything with these.”

(Nelli 520)

The question of *which* portions of her theories are correct occupied one participant’s mind:

”My intention is to get in contact with these academic-level educated scientists or team so that could analyse, study my those theories and make them experiments and everything to ensure, confirm which parts of them hold good.”

(Ulla 373)

On the other hand, the subject could be thinking about *who* she would be sharing her work with:

”Yeah well, now I can’t any more remember exactly what I asked each one but chiefly of course well … in a way the — that the goal has all the time been the same in mind what I’d like, but there have then been of course some such alternatives like who I started to work with […]”

(Marjo 219)

Or, the interviewee could be perplexed about *why* she heard a voice speaking to her:

”I wondered this for another moment there … since came th—: ’What did that kind of thing come for?’”

(Laura 249)

These ten classes probably represent all queries that are ever conceivable. In addition, there were instances in which the participant had *no question* in his mind whatsoever. This was also noted by Cheuk and Dervin (1999) in a recent investigation. The occurrence came about for two different reasons: either the person just wanted to recover a mental image (memory) which he had forgotten, or he did not put his need into words. The next case, in which the participant required information to pass a test, exemplifies the latter cause:

> ”In that I didn’t give any directions but it was a request, such well a wordless request, which was however quite directed to or focused on the exam need so I didn’t like — I strived with the meditation to open like my mind and at the same time asked for information that is needed in the exam ---.”
>
> *(Dagmar 172)*

TABLE 11. Specific 10W Foci of needs and their definitions (n=50)

10W Focus	*Definition: individual needs to know…*	*f**	*%*
Whether	…correctness of something	15	30
What[a,b,c]	…identity of something	10	20
hoW[a,b,c]	…method of doing, being or occurring	6	12
What kind	…attributes of someone or something	4	8
Why[a,b,c]	…reason for something	4	8
When[a,b,c]	…point in time	3	6
hoW much	…quantity of something	2	4
Where[a,c]	…location of something	1	2
Which[c]	…”right” alternative among known options	0	0
Who[a,c]	…identity of someone	0	0
No question[d]	reproduction of memory, or need inconceived	2	4
[Unknown]	[question not mentioned]	3	6
Total		50	100

* A zero (0) indicates that the category was mentioned as a secondary one only.
[a] Sources: Dervin 1983b, 16, 62; Dervin *et al.* 1982, 431.
[b] Source: Dervin 1991, 67.
[c] Source: Kiviaho 1998, 24.
[d] Source: Cheuk & Dervin 1999.

It may be concluded that a specific question represents a conscious information need, whereas the lack of a question stands for an unconscious need or a need which is non-verbal. This ”questionlessness” refers to the same kind of psychological condition as Robert Taylor’s (1968, 182) ”visceral” need. Sometimes it is just not possible to elicit an information need (Crawford 1978, 62). But even if the person cannot formulate an enquiry, this does not necessarily signify that he has no need for information (cf. Cheuk & Dervin 1999). Some Foci remained *unknown*, because the needs were not expressed as questions, even though they could have been. Desiring to know a phone number, for instance, might be indicative of a ”What” query, but there is no telling:

”[…] I had to look for the telephone number.”

(Cecilia 689)

According to Table 11, the specific question asked most was ”Whether” which represented almost one third of the Foci. The next Focus in the order of frequency was ”What” with a share of one fifth. At the lower end of the spectrum of commonness were ”Which” and ”Who” that were not primary Foci in any need. There were also two needs without a verbalized question, and three needs whose 10W Focus could not be identified.

The distribution (in Table 11) is quite different from those in antecedent pieces of research. Comparisons are difficult to make, however, because of the new categories and the fact that the results are mutually contradictory. ”HoW” questions have been discovered to be most popular (Kumpulainen 1993, 50, 84), fairly popular (Tuominen 1992a, 50), and slightly popular (this study). ”What” enquiries have been reported as most frequent (Tuominen 1992a, 50), moderately frequent (this study), and not frequent (Kumpulainen 1993, 50, 84). ”When” questions have been determined to be quite rare (this study; Kumpulainen 1993, 50, 84) and rarest (Tuominen 1992a, 50). ”Why” queries have been found most important (Dervin 1989a, 80), rather unimportant (this study; Kumpulainen 1993, 50, 84; Tuominen 1992a, 50), and least important (Dervin 1983b, 23). It is possible that this heterogeneity is caused by the domain of the investigations or their differing conceptualization of the Foci of need. At any rate, it seems that in the sphere of the paranormal, information is most likely needed to answer the simple-sounding question of whether something is or is not so.

Generic 10W Foci

The multitude of specific 10W Foci brought about the subconcept of generic 10W Focus which collapses all the distinguishable types of queries into close-ended, open-ended, and no questions (see Table 12). *Close-ended* enquiries were ones to which the individual already knew a finite set of possible replies. *Open-ended* questions could have an infinite number of potential answers beyond the actor’s knowledge. ”Whether” and ”Which” are close-ended enquiries, whereas the eight remaining questions are open-ended ones. This typology organizes 10W Foci on a new plane of generality.

TABLE 12. Generic 10W Foci of needs and their constituent specific Foci (n=50)

Generic Focus	*f*	*%*	*Specific Foci*	*f**	*%*
Open-ended	31	62	What	10	20
			hoW	6	12
			What kind	4	8
			Why	4	8
			When	3	6
			hoW much	2	4
			Where	1	2
			Who	0	0
			[Unknown]	1	2
Close-ended**	15	30	Whether	15	30
			Which	0	0
No question***	2	4	No question	2	4
[Unknown]	2	4	[Unknown]	2	4
Total	50	100		50	100

* A zero (0) indicates that the category was mentioned as a secondary one only.
** Source: Kiviaho 1998, 24.
*** Source: Cheuk & Dervin 1999.

I suggest that the classification bears witness to the specificity or the person's awareness of the information need. Thus, a close-ended query would indicate a less general need than an open-ended one, because in the former case, the individual already knows the potential answers, whereas in the latter case, he does not. When he has no question, on the other hand, this may mean that the need is either extremely clear-cut or extremely indefinite. In the former instance, the person knows exactly what he needs, and so he just wants to refresh his memory. This coincides with the apprehension that information is also required about matters that are already known (Derr 1983, 273) but forgotten (see Byström 1999, 29). In the latter instance, the need is so vast that the actor cannot even put it into words. The detected generality of the need can be presumed to be proportional to the actor's knowledge base.

Despite the question type of "Whether" being the number one among the specific Foci, the open-ended queries were still clearly more numerous than the close-ended ones (in Table 12): Foci of the former description amounted to nearly two thirds of the questions, and the share of the latter type was less than a third. This would point to the prevalence of fairly loose information needs. The rest of the generic Foci were two "no-questions" and two unknown enquiries. There was enough material to allow me to deduce that one of the "unknown" questions in Table 11 had to be an open-ended one, even though the specific query did not come out.

* * *

The analysis agreed with Frants' and Brush's (1988, 87) hypothesis that the whole information need consists of diverse partial needs. This is reflected in the actor posing more than one question (ibid., 88). Indeed, the multiplicity of queries was more of a rule than an anomaly. Alas, merely the primary question of each need could be taken along in the quantitative calculations.

Time Foci

Sense-Making states that gaps (information needs) can focus on either the past, present or future (Dervin 1983b, 16, 62; Dervin 1992, 75; Dervin *et al.* 1982, 430, 431). In the light of the results of the current investigation, this picture does not tell us the whole truth. That is to say, there exists one extra Focus: timelessness (see Table 13). When the informant wanted to know about *past* events, these could even be thought to date back to her previous lives:

> "Well … yeah well I asked the second one about my past lives."
>
> *(Helena 373)*

It was possible that a need focusing on the *present* dealt with the partaker's current state of mental health, for example:

> "And then I ask after this what kind of a position he would take, have I been — then of course I asked the psychiatrist if I possibly have some mental disturbance, which I don't myself realize. Does it require treatment or not? What would he think now so would it be useful to make an appointment with someone or not?"
>
> *(Alli 451-453)*

Or, the informant craved for knowledge on the *future* consequences of her presumed abductions by aliens:

> "What will it lead to, and how soon? Or will it lead to anything at all?"
>
> *(Alli 179-180)*

Timelessness is actually not a time as the other Foci are, but rather beyond time or no particular time. A timeless information need could concern general principles, like

extraterrestrials' lines of action:

> "Well I asked him how space people operate and how many there are of 'em among us and on which plane they move and so forth."
>
> *(Paavo 263)*

Sometimes — for instance, when the respondent expressed his need vaguely — the Time Focus had to be assigned as *unknown:*

> "… I'm interested in causes and effects."
>
> *(Alli 354)*

Of the four Time Foci, the paranormal was judged to be solely associated with the past. That is, one of the participants (see above) wanted to know about her previous lives, which implies a belief in reincarnation. None of the interviewees needed to find out about their next lives, or about their life before conception or after death. Information needs on supernature were not primarily taken up from the angle of timelessness, either, even though many phenomena that averredly transcend our physical reality are often regarded by paranormalists as matters which go beyond temporalness. A bigger sample would probably have exhibited these other times, as well. The apparent supernaturalness of Time Foci is more specifically written about in a recent article (Kari 2001, 8-9).

This study particularized the meanings of the old Foci (see Table 13). For instance, a need orientated to the future could relate to a definite moment ahead or to the duration of something. It was not always easy to classify a statement as referring to one time or another, since there is no distinct boundary between the past and present, or between the present and future.

TABLE 13. Time Foci of needs and their features (n=50)

Time Focus	*Features*	*f*	*%*
Present*	•what is: time from narrow to broad "now" (•incorporates some aspects of past or future)	26	52
Future*	•what will be (•will something happen or not?) (•what will happen?) (•when will something happen?) (•how long does something take?) (•may be about distant time ahead)	8	16
Past*	•what was or has been: time from long ago until quite recently (•may be about previous life) (•linked to present)	6	12
Timelessness	•what was, is, and will be (•principles) (•no particular time)	6	12
[Unknown]	[lack of context, need unexpressed, ambiguity of expression, or time not mentioned]	4	8
Total		50	100

* Sources: Dervin 1983b, 16, 62; Dervin 1992, 75; Dervin *et al.* 1982, 430, 431.

By looking at Table 13, we can see that the information needs were sovereignly aimed at the present, in just over half of the cases. The remainder of the needs were distributed quite evenly among the Foci of future, past and timelessness. A Time Focus could not

be assigned to four needs. This order matches the one detected by Kumpulainen (1993, 50-51, 85) among rural residents, although here needs oriented to the future were not so widespread. However, these findings are not consistent with Dervin's and her colleagues' early work (with blood donors) according to which future was the most ordinary Time Focus (see Dervin 1983b, 22; Dervin *et al.* 1982, 437). This discrepancy is hard to account for, except by propounding that either people have changed or scholars' notion of future has changed. A factor which might explain the conflicting results is that the studies were conducted in different milieus and domains. Be that as it may, information needs in the context of the paranormal appear to concentrate on the present time.

Summary

The concept of information need consisted of the following components: topic of need, 10W Focus, and Time Focus (see Figure 7). Altogether 50 information needs were identified.

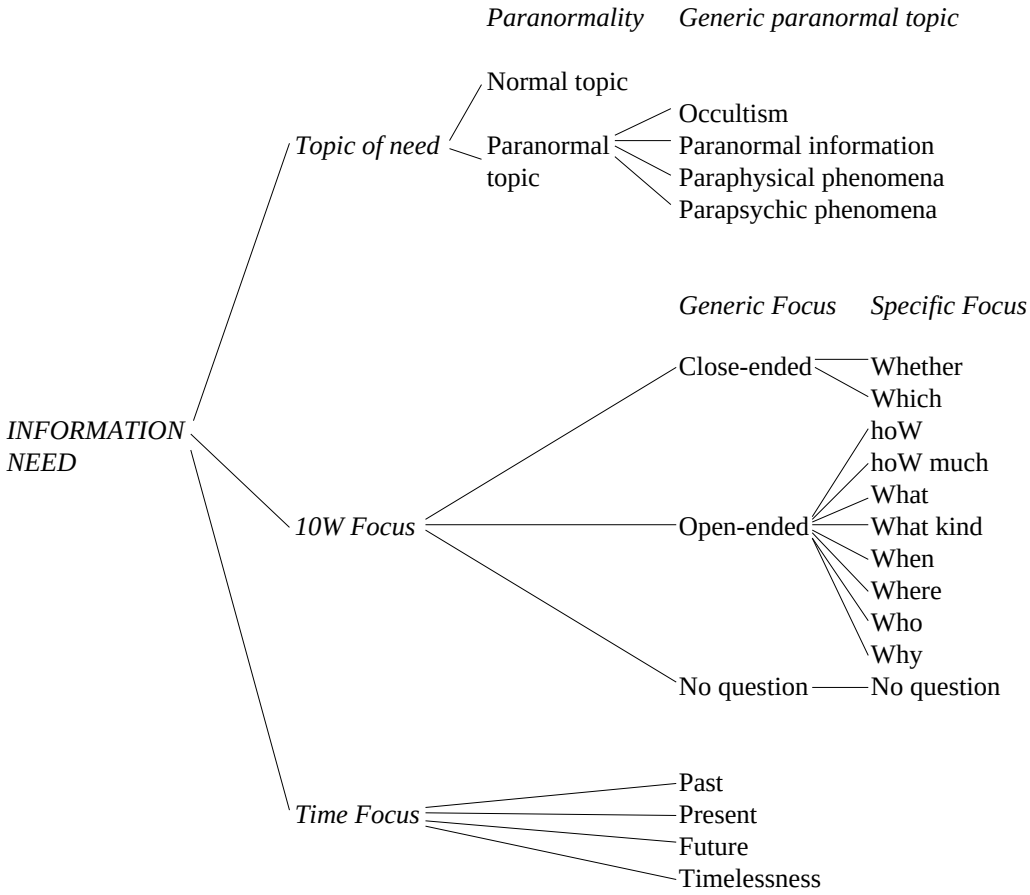

FIGURE 7. Conceptual taxonomy of information needs

Earlier Sense-Making research has shown that the topic of the gap (need) does not correlate with the question asked (Dervin 1983b, 25). The findings herein reinforce this view, for no statistically significant relationship was found between these two facets.

6.3 Information sources

Types of sources

Generic types

First of all, the sources of information could be classified on the basis of their generic type, that is, of what sort of entities they were seen as. Four source varieties were manifest: another being, document, organization, and self (see Table 14). *Another being* could be the apparition of the protagonist's dead husband, for instance:

> ”Yeah well then he came after his death when I — I'm an asthmatic and with a heart condition and all kinds of … diseases in me so well … then he — he didn't use alcohol or anything so — was always then — that I'm running out of others cognac and others so I always then took … well a drink, so when aches and defects started to show up well so … so I often used to say to him in this way that 'have you got now?', so he then used to give me, so now he then appeared after his death, so he came with the bottle of cognac — it was exactly such a packet — with the packet and said … to me that 'now you have … well a turning point in your life and ya need reinforcement'.”
>
> *(Jenni 59)*

A good example of a *document* was a book:

> ”Yeah it was really like of no use so it was the actual next book which I found — on the same shelf that I accidentally found — was this *Soul's Journey* that in it in my opinion like these … experiences on the astral plane were so elegantly explained that how the human being experiences the world when he's dead.”
>
> *(Gaia 310)*

An airport was one sort of *organization:*

> ”Yeah I called the air traffic control there at Q airport, as U requested when calls me, that I have to call the control tow— there in Q so one can know then at what time an aeroplane has been on the move so don't know then if there's been an aeroplane or --- light phenomenon.”
>
> *(Kalle 172)*

Self was a source of information if the interviewee scanned her memory, for instance:

> ”Because it's terribly difficult to get me hypnotized apparently. They've twice they tried me, and it's taken a long time to get me in the state where I'm able to remember anything at all. But when I do remember they can't make me speak. I have to be woken up once in a while so I can tell what I see. So it goes so deep then on the other hand again, or so I've understood at least it goes so deep that I lose the ability to speak. I can hear and understand when the matter is talked about but I can't myself speak out.”
>
> *(Alli 320-325)*

The origin of information was considered as *unknown* in the following illustration in which the participant himself was not clear about the source:

> ”It comes somewhere from the innermost soul — somewhere from the depths. I dunno where it comes from. I guess it's just such pipe dreams. I think it's not a pipe dream or wishing that they were the numbers. So I can't explain it more precisely. They jus' come and go … like that.”
>
> *(Kalle 556-561)*

None of these source types is a genuinely novel category, but this is the first time when all four are examined conjointly. ”Another being” is a straightforward extension of ”human source” (Byström 1999, 47), ”(inter)personal source” (Brown 1991, 11; Vakkari 1998, 368), or ”other people” (Wilson 1981, 4), since it includes not only humans, but also beings of other kinds like spirits. ”Document” is the same as

Byström's (1999, 47) and Vakkari's (1998, 368) "documentary source", as well as Brown's (1991, 11) "impersonal source", while "organization" has been called "formal system" (Wilson 1981, 4) or "institutional provider" (Chen & Hernon 1982, 17) in the past. "Self" is really the only source type whose meaning and expression have not altered since an earlier conceptualization (see Brown 1991, 11).

TABLE 14. Generic types of sources and their definitions (n=70)

Generic source	*Definition*	*f*	*%*
Another being	a being other than actor	42	60
Document*/**	carrier of recorded information	17	24
Self*	actor himself	4	6
Organization***	community (of other beings) with definite purpose and form	2	3
[Unknown]	[source unfamiliar or uncertain]	5	7
Total		70	100

* Source: Brown 1991, 11.
** Sources: Byström 1999, 47; Vakkari 1998, 368.
*** See Chen & Hernon 1982, 17; Wilson 1981, 4.

From Table 14, it emerges that another being was the information source of choice, since it was consulted in almost two thirds of the cases. Documents were the next most favoured of originators by being used in every fourth instance. Self and organizations, on the other hand, were seemingly of marginal importance. As many as five sources were left unidentified. This ranking resembles the ones in my (Kari 1996, 104) and Kumpulainen's (1993, 54) master's theses, except that in those pieces of research, self was judged to be the primary source of information. It is probable that the infrequent turning to oneself in the current study was a result of an interview bias. That is, the subjects were explicitly enquired about information seeking from outside sources. This practice was a heritage of the dominating view of information searching as focusing on information beyond one's own knowledge (see Perttula 1994, 40). Other than that, the distribution of the source types is in conformity with prior findings: other people are preferred over documents (see Brown 1991, 11; Wilson & Walsh 1995, 21), and organizations are used least (see Williamson 1998, 36).

Basic types

Another avenue of separating information sources was by sorting these out according to their basic type — into formal and informal sources (in Table 15) — as Kuhlthau (1991, 361), Malmsjö (1987, 5) and Seldén (1999, 59) do. *Formal* sources carried information in a more or less permanent (recorded) form, whereas *informal* sources contained information in a changeable (live) form. Here, the documents comprise the formal sources, and the other three generic originator categories make up the class of informal sources.

Evidently, the informal sources constituted the great majority of sources consulted with their share of about three quarters (see Table 15). Thus, formal sources were not utilized more often than once in every four cases. Some originators remained unknown, although most of these could be inferred to be of the informal type. It appears that paranormal information is usually searched by consulting informal sources, for both this and the first study (Kari 1996, 104) exhibited such a result. Indeed, the general trend seems to be that formal sources are less utilized and less important than informal ones in people's perception (see Chen & Hernon 1982, 17; Dervin 1983b, 19; Dervin 1989b, 224; Ford 1977, 7; Johnson 1996, 50; Savolainen 1995b, 260; Varlejs 1987, 76; Wilson 1977, 39, 80, 134).

TABLE 15. Basic types of sources and their component generic types (n=70)

Basic source	*f*	*%*	*Generic sources*	*f*	*%*
Informal*	52	74	Another being	42	60
			Self	4	6
			Organization	2	3
			[Unknown]	4	6
Formal*	17	24	Document	17	24
[Unknown]	1	1	[Unknown]	1	1
Total	70	100		70	100

* Sources: Kuhlthau 1991, 361; Malmsjö 1987, 5; Seldén 1999, 59.

Paranormality

Another dichotomy has to do with the rather special nature of my dissertation. It is based on the division of phenomena and processes by their sensed paranormality. The supposed supernaturalness of information sources was already — although very superficially — introduced in my master's thesis (Kari 1996, 82-83; see also Kari 1998b, 33-34), so the dimension is really nothing new. From the point of view of the person, all originators could be said to be either normal or paranormal. A *normal* source was one whose existence is taken for granted in the society at large, although it could be perceived by the actor as having some supernatural abilities. An example of a completely natural source was a psychiatrist:

> "… And I've originally sent a letter to someone who's been a psychiatrist at L Mental Hospital who's doing research now by the way to my knowledge at the moment, so sent to him about the matter and he's said that people are interested in what they are interested in but he can't say what should be done, so I thought that I write to L then I suppose the letter will from there go then onwards and see what they do and I explained like in broad outline what this is about."
>
> *(Alli 19)*

A *paranormal* source was one whose very existence or nature is disputable from the objective point of view. An originator like this could be, for example, God:

> "I guess I actually addressed it to God so I do have such some kind of a notion of God too that isn't anything so personal but like I see as that is --- this old man there sitting on a cloud's edge but well … anyway who is like even higher or wider than the Higher Self that is well … I do often like address thoughts and requests quite directly to God. Thanks too and whatever. So I do feel such a spirit which is like present in everything in absolutely every atom and every thing, who is also this exactly this Creator then this primordial energy. It's precisely the same as Love I guess. Three same thi— designations for the same thing: Basic Energy and Love and God they are to me quite the same. So to the Spirit … I made the request."
>
> *(Dagmar 180-186)*

Classifying a particular source of information as paranormal was naturally grounded on the respondent's more or less subjective opinion on it. This was not something that the researcher could arbitrate. Nevertheless, the existence of supernatural originators would have huge implications for all of mankind. For this reason alone, information sources considered as paranormal ought to be pursued in further studies. The human being's supposed ability to employ such sources is an interesting issue from the perspective of accessibility, for example. That is, different people probably experience the availability of information sources differently (Wilson 1997, 45), because the opportunities of and aptitude for seeking information vary from one person to another (Savolainen 1993a, 103). People's consciousness of, and capability to utilize information sources is

frequently imperfect (Ford 1977, 70). This aspect was reasonably evident in the piece of research at hand, for the informants' proficiency in using reportedly paranormal sources appeared to fluctuate from a complete disability to ”natural” interaction. This means that the access to various paranormal sources is perceived differently by different people at different phases of their evolution. It may be postulated that one's consciousness is a key factor here.

Normal sources were the dominating category of originators with their share of two thirds (47 cases). Consequently, every third source (23 observations) was regarded as a paranormal one. This ratio might be more balanced if the instances of normal information action had been excluded altogether. Still, even the current findings demonstrate that entities felt to be supernatural apparently act as a source of information surprisingly often. This distribution cannot be compared with that of my first study (see Kari 1996, 102-103; Kari 1998b, 33-34), because in that investigation, the respondents were inquired about the personal importance of information channels, not about their actual usage.

Particular sources

Lest the results on information sources remain all too shallow, it is beneficial to scrutinize them in more detail. To this end, Table 16 lists all the different individual originators by their generic type and paranormality, thereby erecting an eight-class taxonomy. This contains both normal and paranormal other beings, documents, organizations, and selves. All of these were manifest in the data in one form or another. If *normal* sources are looked at first, it soon becomes evident that many of them were in fact somehow or other linked to the supernatural. Among *other beings* alternative therapists, astrologists, clairvoyants, alien contactees, fortune-tellers, healers, hypnotists, and mediums were information sources which were deemed possessing paranormal talents or at least having strong experiential or informational ties with the supernatural. Within the class of *documents*, Tarot cards could be observed as involving some inexplicable influences (Jenni 1, source 2), as they are often used by fortune-tellers.

While some of the consulted *paranormal* sources in Table 16 are self-explanatory, most of them merit a further discussion owing to their special properties. To start with, *other consciousness* was felt as a pure consciousness, without a body of any kind (Ulla 1, source 2). A peculiar regularity about *spirits* and *extraterrestrials* was noticed. When spirits had acted as originators, the participants had always encountered one spirit only, but when beings from outer space had informed the interviewees, there had nearly always been more than one creature present. An exception to this rule was discovered, however, as one of the partakers had been in contact with single extraterrestrials (Ulla 1, source 3B). The reason for this was possibly that — as the individual said — she had been meeting with a group of aliens earlier on a more or less regular basis. As each party had become more familiar with the other, the interaction had tended to shift towards one-on-one communication.

Information field was a tricky source to categorize, because it could be understood in two complementary ways: either as a network of interconnected Higher Selves (constituting a sort of organization), or as an energy field recording everything that happens in the universe (being a kind of document) (Ulla 1, source 2). In the end, the latter category was selected, because the interviewee seemed to favour this view. She even referred to the field with the metaphor of ”the spiritual Internet”. *Higher Self*, in its turn, was seen as the part in the human being which is immortal and which dons different bodies and egos in different incarnations. Although Higher Self was regarded as an essential component of the totality of an individual being, no direct link was discerned between it and waking consciousness, as Higher Self was reckoned to exist in the world of the spirit (see Dagmar 1, source 1). Finally, *subconscious* was placed in the paranormal originators, because in the supernaturalists' circles, the unconscious has conventionally been considered as a mysterious part of the human psyche, still lacking a valid scientific explanation.

TABLE 16. Particular sources by generic type and paranormality (n=70)

	Paranormality of source				
	Normal		Paranormal		Total
Type of source	Sources	f	Sources	f*	f
Another being	air-traffic controller alternative therapist astrologist clairvoyant doctor ET** contactee fortune-teller friend healer hypnotist medium researcher seller teacher	26	ET** being -expert -guide -teacher other consciousness spirit -angel -God -guide -Jesus -relative	16	42
Document	book serial publication Tarot cards television programme	16	information field	1	17
Self	memory	1	Higher Self subconscious	3	4
Organization	airport association editorial office research institute	2	ET** federation	0	2
[Unknown]	[not mentioned]	2	[ambivalent or not mentioned]	3	5
Total		47		23	70

* A zero (0) indicates that the category was mentioned as a secondary one only. ** ”ET” = extraterrestrial.

Table 16 informs us that there were more normal than paranormal sources in the category of other beings, and that normal others were a source once in every four times. Documents were exclusively normal, with one exception only. It is perhaps of interest to note that paranormal others were used as an originator just as often as normal documents. In the class of self sources, paranormal ones were more prevalent. Organizations were strictly normal: no paranormal organizations were resorted to as an information source, although one was mentioned as such in passing. A few unknown sources were of both normal and paranormal types. All in all, a normal (human) being appeared to be the most common source. Paranormal entities and normal documents were well-matched runner-ups, whereas sources of the other kinds were seldom turned to.

Against this background, Tula Giannini’s (1998, 364) assertion that information is primarily sought through information retrieval systems does not make sense. The only electric device that was mentioned here as an information source by the participants was television. It should be noted that computerized information networks (like the Internet) did not become common until the mid-1990’s (Savolainen 1999b, 92). The empirical

material in this thesis, on the other hand, talks about events that date back to between the 1960's and 1998. It is plausible that the introduction and spreading of the World Wide Web may have somewhat changed the scene of sources in information seeking related to the paranormal, as well. Hence, research paying explicit attention to the Internet could be relevant in this area.

Roles of personal sources

During the analysis, it became apparent that personal sources were not just sources of primary information, but they were seen as having different roles from the point of view of the seeker. In the rough order of their commonality, among *normal beings* these positions were originator, medium, facilitator, guide and interpreter. An *originator* was a person from whom the individual could get information directly. In the sample below, the participant conversed with alien contactees:

> "I heard — when I went to a meeting of X Association then later — there were also well this kind of humanoid contact persons, who told they'd in B received information … about this universe from humanoids and they were presented there at the lecture then this BL … presented them there, and well then I exchanged with 'em a few like a couple of words there that could they have been the same guys as when I was like cleaning the sea that could it have been the same case?"
>
> *(Gaia 230)*

This function is the most familiar one, having been examined in virtually every study of information seeking. A *medium*, on the other hand, was someone who delivered information from an alleged paranormal being — like the actor's late father — because the individual was unable to directly interact with this entity:

> "So he put it --- 'there's this and this person here, who says that and that'. He didn't say that 'I say' but that he is a mediator there only."
>
> *(Sampo 162-163)*

The role in question belongs to the sphere of the paranormal only. A normal medium could be a human relaying a message from another person. A *facilitator* was someone who helped the actor in getting in contact with a source which could only be met with in an altered state of consciousness. In practice, these partners were hypnotists who tried to dig up something buried in a couple of interviewees' subconscious:

> "Well the latest a little bigger for which it can be said that I've used an outsider's help in seeking information and that way gettin' more information is this that I've to BL sent to UL first a letter and that way it's gone to L and now then been in hypnosis twice then interviewed."
>
> *(Alli 15)*

Facilitation is also beyond the realm of normal information seeking. However, a more ordinary version of this role might be granted to a person who assists the seeker in remembering a forgotten thought, for instance, without a transformation of awareness. A *guide*, in turn, was somebody who did not know the answer to the actor's question, but who told him instead where to find the "right" originator of information:

> "They didn't know, but they did say where information can be acquired, and they mentioned this kind of crystallographist or whatever --- is … this stone researcher in this university, where they are very accurate mathematical formulas on these then."
> *"In which university was this?"*
> "He didn't expressly say which university, but he said that a person like this should be found in universities."
>
> *(Risto 698-700)*

This position refers to the same thing as "information provider" — a physical carrier of information which directs or is expected to direct the person to a source (Murtonen 1992, 47; see also Chen & Hernon 1982, 21). An *interpreter* was a person who

translated information from one language into another, so he can be analysed in any context. In the current study, these people were fortune-tellers who interpreted the symbols on Tarot cards:

> ”Tarot cards have them pictures, so they perfectly tell the pictures that — but yes she did … then … interpret them, so of course her thoughts and images mingle with it then. And these — there are rather many explanations for them I guess for the cards so mu— which have to be learnt by the heart.”
>
> *(Jenni 436-437)*

Paranormal beings had one of two roles: direct source or mediated source. When regarded as sources, they were almost invariably seen as *direct* ones, that is, as sources who communicated with the actor without a go-between:

> ”I felt like such a presence that is I didn’t see anybody or anything, but felt that someone came to me in the same way as when well I told about how my grandma’s sister before her death came to say hello to me ---. Was just present, and talked to me like that telepathically. So I well — when J actually … came to me she was just like somebody — something great, something greater than I myself.”
>
> *(Dagmar 301-303)*

A *mediated* source was a supernatural being whose message was conveyed by another person with an aptitude for the task. Here, a spirit informed the respondent via a companion of hers:

> ”He said these through automatic writing then, and --- friend writes them — no I don’t write them — he my friend —”
>
> *(Nelli 42)*

A paranormal source was mediated in just one instance, possibly because the individual had lacked the capacity for direct interaction. Later, when their relationship had evolved, the being did seem to converse with the person without any intermediaries.

Tactics of information seeking

Literature suggests that information search strategies are bimodal (Brown 1991, 11). This is evinced by binary opposites such as ”inquiry” vs. ”monitoring” (Ashford & Cummings 1983, 382-385), and ”searching” vs. ”scanning” (Belkin 1993, according to Sonnenwald 1999, 177). There are exceptions, though, like Berger’s (1979, 134-142) trio of ”active”, ”passive” and ”interactive” strategy, as well as Wilson’s and Walsh’s (1995, 22) quartet of ”active search”, ”passive attention”, ”passive search”, and ”ongoing search”. Moreover, three recent papers introduce a novel category called ”incidental acquisition” (Williamson 1998, 24), ”information encountering” (Erdelez 1997, 412), or ”information receiving” (Giannini 1998, 363). In this study, a complete set of three tactics could be discerned: active search (inquiry/searching/active strategy), passive search (monitoring/scanning/passive strategy/passive attention), and accidental discovery (incidental acquisition/information encountering/information receiving). Although all of these approaches have been analysed in earlier research, they have not been examined together before.

In *active search*, the individual hunted for a source in order to get hold of information that he acutely needed. Here, the respondent was looking for a telephone number:

> ”--- did I call two different places in U? I — two places in U and then … I can’t remember if it was an editorial office of a magazine was in F but in any case this was this third then I guess this — when I called that Q Association in F. There I got it then.”
>
> *(Cecilia 492-495)*

This is the paradigmatic mode of information seeking on which so much research is based. *Passive search,* on the other hand, involved the casual and opportunistic gathering of information, usually without any particular need for it. The excerpt below tells us a story of reading books:

> ”Well I didn’t like search actually for anything to search anything — or to explain this incident so it really was so that I just like was interested just in reading these books then at the same time so I didn’t understand at all — I didn’t connect them with any this kind of events, so I just read books, that well — that that — indeed like the fact too that I happened to hit on the chakra book not until that spring after the strange experience and then well — and then this *Love: A gift from stars* … I also read not until some time in the spring, when this whole business was like hassle was actually over so well … it was so spontaneous and such that …”
>
> *(Gaia 217)*

It is often the case that even when information is needed, rather than actively going after it, people tend to wait until they conveniently run into it in their encounters with others (Scott 1991, according to Johnson 1996, 95) or documents. *Accidental discovery* worked on a principle which was quite different from that of the first two approaches, for in effect, it implied the lack of a tactic of any kind. Instead, from the individual’s point of view, he met with a source by pure chance,without any premeditation whatsoever. One interviewee was taken by surprise when her friend proposed foretelling her future:

> ”We toured the Spain a little bit here a little bit there and this person was with us. When we got out of the car then she said come well to her place so she’ll see for you from the cards what’s going on in your life. That way it came just like that … spontaneously. --- then and … then she told fortunes by those cards for both of us then, so it wasn’t even prepared there in any way. Just like that ex tempore ---.”
>
> *(Jenni 394-398)*

This outline is to a great extent similar to prior views. The individual may unexpectedly find relevant information when looking for something else, or even when he is not searching for any information (Erdelez 1997, 412; Williamson 1998, 24, 36; Wilson 1977, 36). Occasionally, it is in fact the information source that is trying to find the person (Johnson 1996, 4). The common denominator in these incidents is the fact that coming across information cannot be anticipated in advance (Savolainen 1999b, 85) by any normal means. However, here accidental discovery was not really coincidental at all — save from the individual’s perspective — in the sense that it was invariably another person or being who wished to get in touch with him. The tactic of seeking was allocated into the category of *unknown* if no tactic was expressed, or if diverse approaches had been used at different times of consulting the same source. In this case, the informant did not mention how she came to watch a television programme:

> ”Once telly talked about those native tribe from Borneo and that quarter. […] So it was just now is it a week or two when it was on telly such a programme.”
>
> *(Alli 689, 700)*

Table 17 indicates that active search was the tactic adopted most often, in finding almost half of the sources. Passive search and accidental discovery were nearly equal in frequency, even though the share of the former was closer to one fourth as opposed to the slightly smaller portion of the latter — one fifth. Unknown approaches amounted to a sizable share of one eighth. As there are no comparable quantitative findings on tactics in other pieces of research, contrasts cannot be made at this time.

As a final remark about this subconcept, one issue must be emphasized. First and foremost, the tactic of seeking deals with the way of looking (or not looking) for a source. Actually *finding* the originator is a different matter. That is to say, although an interviewee was actively looking for a source, it could eventually be the source that found him, not the other way around. This applied to passive seeking as well, perhaps

even more so.

TABLE 17. Tactics of information seeking and their properties (n=70)

Tactic of seeking	*Properties*	f	%
Active search*	•own intention and initiative •source may be pinpointed, or maybe not •seeking may occur immediately or later •seeker active (•methodical) (•seeker may not find source himself) (•source may contact seeker) (•may involve reluctance)	31	44
Passive search*	•seeker passive •impulsive •casual (•may be on own initiative) (•no particular purpose) (•browsing) (•may be part of conversation) (•unconscious) (•effort may be involved) (•spontaneous) (•no haste)	16	23
Accidental discovery**	•no intention or anticipation •source contacts individual (•may be arranged by another) (•not coincidence)	14	20
[Unknown]	[tactic not mentioned, or it varies on different occasions]	9	13
Total		70	100

* Sources: Wilson *et al.* (1999, ch. 2.1); Wilson & Walsh (1995, 22), although here passive search means the same as Wilson's and Walsh's "passive attention".
** See Erdelez 1997; Williamson 1998.

Choosers of sources

Finding out the cause for selecting a source was not as straightforward as one might think. That is, it was not always the "protagonist" who did the choosing, but it could be someone or something else. Therefore, it was necessary to first determine the selector of the source.

Specific choosers

The selectors of information sources turned out to be five different types of entities: another person, coincidence, Providence, self, and source (in Table 18). Of these, *another person* was an outsider, i.e. somebody other than the source or the actor himself. In the following specimen, the other personage was a researcher:

> "So this L said that I should call there some Q Airport. Well it was his like, that he requested me to call, find out about the matter. It was his idea like."
>
> *(Kalle 358-360)*

Occasionally though, this ”other” could also be a document. The selection made by another was not necessarily absolute, for it could occur in the form of a recommendation. The other individual was in fact playing the part of a guide (see roles above). *Coincidence* was actually not an entity at all, but rather the absence of one. It was precisely what the word connotes — in his opinion, the individual came across the source wholly by serendipity:

> ”— so it was really pure chance that I found such a book and started to read such a thing I didn’t understand anything of it it was totally chaotic, so well … I did understand it just moved on a plane different from the ordinary one. […] So that I found it the name of the shelf read there then I found it there by accident.”
>
> *(Gaia 271, 347)*

The import of *Providence* was not very explicitly articulated: it was thought of as subtle but purposive guidance received from either a divine being or some sort of a higher law or principle (Fate). Locating a source in this way was not reckoned as self-planned nor random, either. So the interviewee sometimes thought that it was Providence which somehow made him seek out the source of information (Paavo 1, source 4), or delivered it to him, like in this instance:

> ”Pals — so I know a whole lot of others too who I could’ve asked about the same things. This just came again Fate brought ’em. Providence like brought ’em like before me. I also believe in that the people — that those we have to bump into those we have to so not — --- feel that there are no like such unnecessary steps in life actually at all so all of them we need those which we encounter: people, things, situations. And all that we just have to face.”
>
> *(Marjo 244-248)*

In any case, it was characteristic of this outward happenstance that the meeting of the two was believed to have a certain meaning behind it. This unobtrusive intentionality distinguishes Providence from mere coincidence. Among the various selectors, only Providence is peculiar to the realm of the paranormal. *Self* ought to be self-evident — the actor picked the source:

> *”Well why did you go to this particular man? Why not to someone else ---?”*
> ”I accidentally last year talked to him about the topic and he chatted — or said that he has gone in for hypnosis, masters well ordinary and middle and deep hypnosis and … so forth.”
>
> *(Risto 733-735)*

When *source* was the chooser, on the other hand, it opted to contact the actor in order to tell him something. The sample below features a team of space people:

> ”… Well, there’s also such a thing that they say there’ve been these past lives so when have been on different planets so then have been like in contact with this kind of space friends. They’ve like lived also on the same planet as I so — sometime in previous lives so — they’ve deemed on the basis of this that I for this reason a good contact person for this kind of thing, for spreading this kind of information as have a background similar to theirs too and they’re like simi— such old friends, I’m like an old acquaintance of theirs so they have thought that this being the case I fit in terribly well like with conveying about these as I know already — I have prior experiences of different planets and like this in various past lives so to me it’s like a more natural thing like you can notice that in my childhood time all these UFO games, and UFO books as soon as I learnt to read so with me these have belonged since childhood already to everyday life this kind of UFO matters, humanoids and like this and it’s for this reason even quite natural that they contacted me then.”
>
> *(Ulla 336-337)*

Some choosers *(unknown)* could not be determined, for the same reasons as with the tactics of seeking. In one case, for example, the interviewee neglected to say why she went to a rehabilitation centre:

”Yeah, but I went then to rehabilitation or this … this kind of physical therapy and I was told there I have a floating joint, that it’s worn and there of course there … the muscles are --- from the thigh completely.”

(Cecilia 294)

TABLE 18. Specific choosers of sources and their characteristics (n=70)

Chooser of source	*Characteristics*	*f**	*%*
Self**	•individual selects source himself	40	57
Source	•source chooses individual and has a message to him (•…because source wants to help individual) (•…because source wishes to use individual as channel) (•…because source is familiar with individual) (•…because individual is suitable recipient) (•…because individual is ready to receive message) (•…because source desires to lead individual in right direction) (•…because source intends to educate individual)	14	20
Another person	•someone else selects source on behalf of actor (•selection may be just recommendation) (•another person may take individual to meet source) (•”another” may be document) (•…because individual is unfamiliar with source) (•…because other person knows source) (•…because source is closer to individual than other person is)	4	6
Providence	•Providence or Fate brings either source to individual or vice versa •finding source by apparent accident has certain purpose	2	3
Coincidence	•individual finds source by pure chance	0	0
[Unknown]	[chooser not mentioned, or it varies from occasion to occasion]	10	14
Total		70	100

* A zero (0) indicates that the category was mentioned as a secondary one only.
** This class is broken down further in Table 20.

By reading Table 18, one can easily see that the information seekers themselves were the predominant choosers, as well over half of the sources were decided on by them. It is likely that this is in fact the practice in the ”normal” world, as well. Other entities accounted for much less selecting: the next most frequent choosers were information sources (in every fifth case), and the others acted as choosers quite rarely. Actually, arriving at a source was virtually never conceived as chiefly resulting from a sheer coincidence. This reflects well the common notion among paranormalists that everything has a purpose. As many as every seventh chooser could not be identified in the data.

Generic choosers

To condense information further, the five specific choosers of sources were refined into a more generic typology of selectors consisting of three classes: another being, self, and no-one (as in Table 19). Here, *another being* incorporates another person, Providence, and source. I elected to place Providence in this category after all, following the traditional sense of the concept. *Self* is exactly the same as in Table 18, and *no-one*

equals coincidence.

TABLE 19. Generic choosers of sources and their constituent specific choosers (n=70)

Generic chooser	*f**	*%*	*Specific choosers f**	*%*	
Self	40	57	Self	40	57
Another being	20	29	Source	14	20
			Another person	4	6
			Providence	2	3
No-one	0	0	Coincidence	0	0
[Unknown]	10	14	[Unknown]	10	14
Total	70	100		70	100

* A zero (0) indicates that the category was mentioned as a secondary one only.

At this scale, self was still the most common chooser, for other beings made the selection of a source less frequently than every third time (see Table 19). ”No-one” was still in no case really reckoned as having chosen a source, and unidentified selectors were just as numerous as with the specific choosers.

Reasons for choosing

Since seekers of information were the sole participants in the study, it goes without saying that only their own reasoning could be properly studied. As the causes for their selecting particular sources were examined, four *generic* reasons stood out: environment characteristic, seeker characteristic, source characteristic, and unconscious impulse (see Table 20). The characteristics merely signify that there was something about the seeker, his environment, or the information source which made the searcher choose a particular originator. An *environment characteristic* could mean that other people’s talking about the partaker’s destined career gave her a stimulus to acquire information on that province:

> ”No, so it was when they said this then … I began to … read more literature on the … field.”
> *(Helena 310)*

Felt fright was a *seeker characteristic* effecting the solicitation of a source:

> ”But the fact that when they came three times in a roll the same cards, then this did make me think a little what this is then … and then came the fear, so that I had to call ho---.”
> *(Jenni 417)*

Another criterion for choosing was a *source characteristic,* such as its having experiences analogous to the searcher’s:

> ”Then I needed to go to the library to read and then of course … ask about things from people who had experiences similar … to mine.”
> *(Paavo 15)*

Unconscious impulse means that the choice was made by the seeker, but not consciously:

> ”No I mean that I like unconsciously have like sought out in the library like exactly the kind of thing from which I can get like information on this other dimension, and I’ve like then started from this quite basic thing what — what kind of … these planes exist that is astral, mental, causal —

whatever there are of these."

(Gaia 192)

TABLE 20. Generic reasons and their constituent specific reasons for information seekers' choosing sources (n=40)

Generic reason	*f*	*%*	*Specific reasons*	*f**	*%*
Source characteristic	20	50	Only alternative**	6	15
			Best alternative**	3	8
			Knowledge***	3	8
			Paranormal abilities***	2	5
			Can help***	1	3
			Good alternative**	1	3
			Has experiences similar to seeker's***	1	3
			Has something to say to seeker***	1	3
			Name***	1	3
			Sensibility***	1	3
			Convenience***	0	0
			Credibility***	0	0
			Does not fuss***	0	0
			Duty to seeker***	0	0
			Experience***	0	0
Seeker characteristic	9	23	Curiosity	4	10
			Desire to experience the paranormal	2	5
			Need for help	2	5
			Fear	1	3
			Desire for entertainment	0	0
			Desire to get in contact	0	0
			Desire to grow	0	0
			Desire to test source	0	0
			Limitedness	0	0
			Need for confirmation	0	0
			Need to pass beyond bounds	0	0
			Respect for source	0	0
Unconscious impulse	3	8	Unconscious impulse	3	8
Environment characterist.	1	3	Another's words	1	3
			Another's negative feelings	0	0
			Rising of opportunity	0	0
[Unknown]	7	18	[Unknown]	7	18
Total	40	100		40	100

* A zero (0) indicates that the category was mentioned as a secondary one only.
** These 3 categories represent properties of sources as compared to other sources.
*** These 12 categories describe aspects of sources in themselves.

Some reasons were classified as *unknown* due to their vagueness. The next example does not divulge what made the interviewee switch on the television:

"That here we have to go through all kinds of things and humanity goes mad and materializes like this until then again realizes spiritual values and so forth but then well … just then I had like such a thing that I wasn't any longer able to have faith I like … there was something on TV right then … there was war and there were catastrophes all kinds of things I somehow then like … cut out so I like … that 'the hell with this bunch, that this isn't gonna work'."

This is a brand-new classification which more than just aggregates old categories. In order to broaden the scope of this subconcept to also cover those instances in which the individual did not select the source, it would be possible to enquire from the participant about why he thinks the other person or being chose the source or respondent.

In exactly half of the cases (in Table 20), source characteristics determined the choice of the sources. The second most notable factors were seeker characteristics which guided the selection of almost every fourth source. Unconscious impulses and especially environment characteristics had little impact on opting for sources. Regrettably, nearly one fifth of the reasons could not be pinpointed.

The generic reasons have also been broken down into their *specific* reasons in Table 20. These causes represent all the factors which came up in the data, but they are by no means an exhaustive presentation. But even this list demonstrates that the bases for selection were indeed extremely varied. The results suggest that the most frequent (every seventh) individual reason for choosing a source was the fact that the source was considered as the only viable alternative. The second most pertinent justification was the seeker's own curiosity (in every tenth case). Many causes — 15 to be exact — for selection were mentioned as secondary only. It must be remembered that these shares may not be entirely truthful, because the biggest category of specific grounds was in fact the unknown ones.

Many major causes for choosing an information source have been listed by previous authors: accessibility[26] (Chen & Hernon 1982, 64; Ford 1977, 12, 70; Johnson 1996, 94), ease of use (Ford 1977, 12; Savolainen 1993a, 100), familiarity (Culnan 1983, according to Johnson 1996, 93; Savolainen 1993a, 100), least effort (Hardy 1982, 289; cf. Johnson 1996, 96), physical proximity (Savolainen 1993a, 100), prior experience (Savolainen 1990, 72; Savolainen 1999b, 85), and promises of usefulness (Savolainen 1990, 72; Savolainen 1999b, 85). What is striking is the fact that not a single one of these motives was mentioned as a primary reason in the current investigation. Founded upon this result, it may be claimed that the rationale behind picking sources in the context of the supernatural is very different from that in conventional settings.

Dependencies

Type of source

The *basic type* and *paranormality* of information sources covaried (see Table 21). On the one hand, about two out of five informal sources were regarded as paranormal, but only one out of 17 formal sources was seen as supernatural. On the other hand, of the normal sources, some two thirds were informal, whereas of the paranormal sources, no less than 22 out of 23 were informal. This result supports the observation made earlier (in Table 16) that formal supernatural sources were extremely uncommon.

[26] However, it appears that the reachability of a source is not so salient in leisure contexts (Ford 1977, 12).

TABLE 21. Basic type of source vs. its paranormality* (n=69)

	Basic source					
	Informal		Formal		Total	
Paranormality of source	f	%	f	%	f	%
Normal	30	43	16	23	46	67
Paranormal	22	32	1	1	23	33
Total	52	75	17	25	69	100

* $\phi = 0.33$, $p<.05$.

Type of source vs. tactic of seeking

According to Table 22, there appeared to be a fairly strong connection between the perceived *paranormality* of a source and the *tactic* used to reach it: normal information sources were ordinarily consulted through an active search, and accidental discoveries were exceedingly rare. On the other hand, paranormal sources were most often found by accident; a passive search was the least frequent method of seeking. In reverse, this regularity implies that normal sources do not usually come to tell the individual about things, but he must seek them out by himself. On the other hand, it is not so customary to actively (let alone passively) search for paranormal sources. Instead, these are described as arriving as they please, out of the blue, to inform the person. It is likely that this habit has something to do with the perceived accessibility of sources that was discussed above. Perhaps reputed paranormal sources are not sought so frequently, because people feel they do not have the ability to contact them. Or, maybe they just cannot imagine resorting to such extraordinary help. This would be an intriguing research object.

TABLE 22. Paranormality of source vs. tactic of information seeking* (n=61)

	Paranormality of source					
	Normal		Paranormal		Total	
Tactic of seeking	f	%	f	%	f	%
Active search	25	63	6	29	31	51
Passive search	13	33	3	14	16	26
Accidental discovery	2	5	12	57	14	23
Total	40	100	21	100	61	100

* Cramér's $V = 0.59$, $p<.001$.

Chooser of source vs. type of source

A dependency of a kind was found between the *generic chooser* and *basic type* of information source (see Table 23): when the person chose the source by himself, the source was an informal one in nearly two thirds of the cases. But if the chooser was someone else, the source was almost invariably informal. Another way to put this would be to say that informal sources were more often picked by the actor himself, whereas formal sources were almost without exception selected by him.

TABLE 23. Generic chooser of source vs. basic type of source* (n=59)

	Chooser of source					
	Self		Another being		Total	
Basic source	f	%	f	%	f	%
Informal	25	64	19	95	44	75
Formal	14	36	1	5	15	25
Total	39	100	20	100	59	100

* $\phi = 0.34$, $p<.05$.

What is more, there was a reasonably intense covariation between the *generic chooser* and *paranormality* of source (see Table 24): the seeker conventionally selected normal rather than paranormal sources, while others tended to choose paranormal sources instead. This can be explained by the finding above (in Table 22) that paranormal sources were customarily seen as seeking the individual, not the other way around. That is to say, these sources chose themselves to be information originators.

TABLE 24. Generic chooser of source vs. paranormality of source* (n=60)

	Chooser of source					
	Self		Another being		Total	
Paranormality of source	f	%	f	%	f	%
Normal	35	88	6	30	41	68
Paranormal	5	13	14	70	19	32
Total	40	100	20	100	60	100

* $\phi = 0.58$, $p<.001$.

Summary

The sources of information were scrutinized according to their type, the tactic of information seeking, and their chooser (see Figure 8). A total of 70 sources were examined.

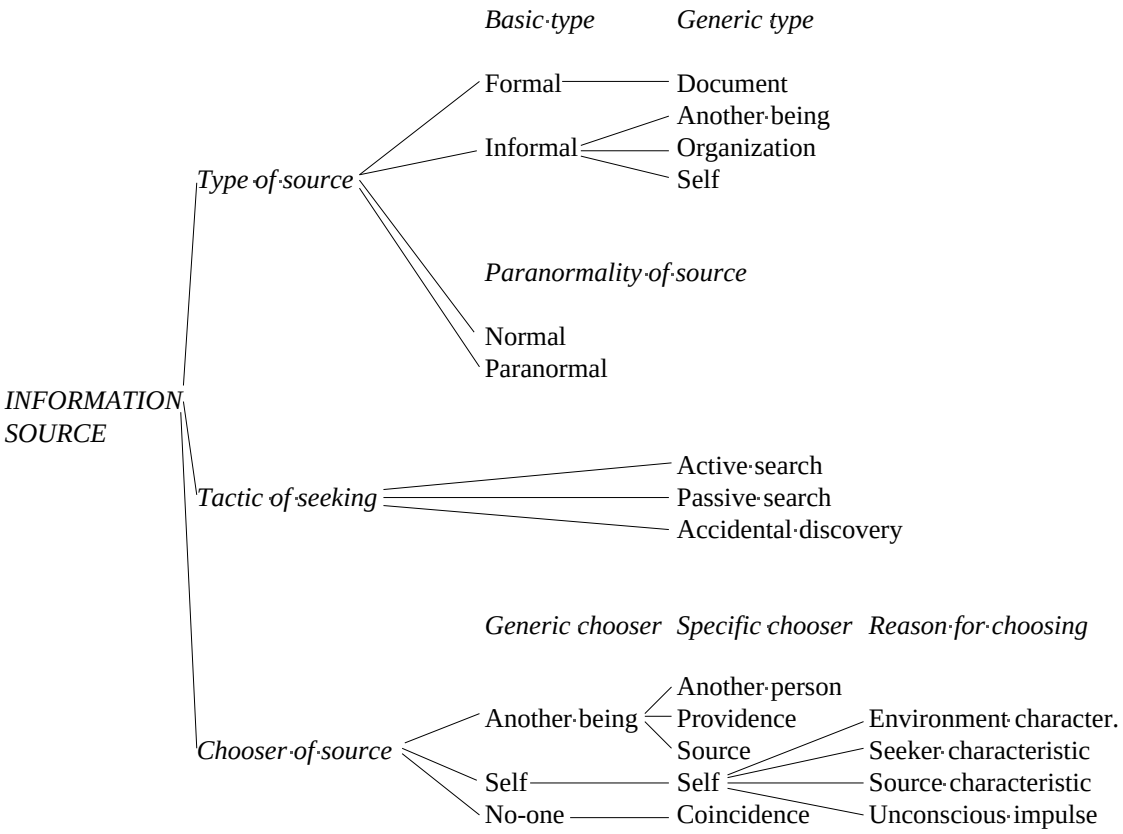

FIGURE 8. Conceptual taxonomy of information sources

6.4 Information

Topics of information

Paranormality

The subjects of the acquired information were categorized in exactly the same way as those of the information needs. Thus, they were initially divided according to their supernaturalness, into normal and paranormal topics. A communication with a *normal* theme would mainly talk about something ordinary, such as health:

> ”Well — well yeah that … I would have after all like … an easy life then so it won’t continue as this kind of diseases, that like this atmosphere will be cleared and those diseases and others will fall out. […] So then the message came from there then anyway that I’ll make it.”
>
> *(Jenni 440, 463)*

When the information was about the *paranormal*, it essentially dealt with something preternatural like healing:

> ”… Yeah and even hea---, and then such a thing he — he now said to me that ’you’ve got a gift of healing’.”
>
> *(Nelli 74)*

A topic was labelled *unknown* if the actual content of information was not elucidated:

> ”Well, this *The cosmic message of UFOs* — UL’s book *The cosmic message of UFOs* is an excellent book because there are space people’s messages in it … in the third part, and it’s a good package for everybody who’s interested in these things.”

From Figure 9, we can see that normal topics of information were dominating, for they represented half of all subjects. The share (well over one third) of paranormal topics was not, however, much less. The remaining one eleventh were unknown themes. When the paranormality of topics of obtained information (Figure 9) and information needs (Figure 6) are contrasted, it can be observed that the distributions did not differ greatly. An exception were the unknown subjects, as their portion in information doubled from that in needs. This was mainly because some of the interviewees had a tendency to talk more about the nature of information than its content. Anyway, these findings could induce one to deduce that the acquired information generally matches the information need, in as far as the topic is concerned. The truth is exposed later on.

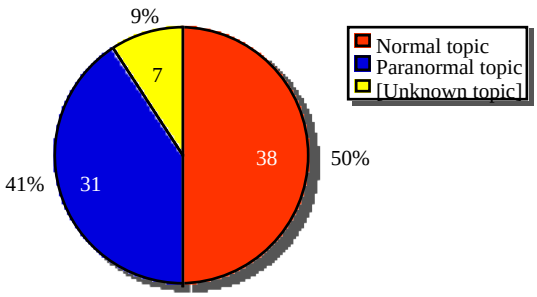

FIGURE 9. Paranormality of topics of information (n=76)

Normal topics

Altogether 37 diverse normal topics could be recognized (see Table 25). The theme that occurred most often was ”health” which was the major topic of six pieces of information. Some half of the subjects manifested themselves only once, and over a third were merely secondary topics. There were almost as many unknown subjects as there were ”health” topics, which weakens the result.

When comparing the normal topics of information (Table 25) and needs (Table 8), it is evident that the two sets of themes were by no means identical. First of all, the range of the topics of information was much wider than that of needs. Secondly, the distributions seem alike, but in closer examination, it was revealed that the mutual subjects appear in a disparate order in the two tables. For example, ”health” occupied the first position in the received information, but the fifth position in the needs. On the other hand, ”people” was the second most frequent topic in the information, but the first one in the needs. Likewise, ”work” was number six in the information, but number two in the needs. All in all, ”people” was the sole theme which ranked highly among both the information and needs.

TABLE 25. Normal topics of information (n=38)

Normal topic	*f**	*%*
Health	6	15
Numbers	3	8
People	3	8
Death	2	5
Events	2	5
Action	1	3
Birth	1	3
Buying	1	3
Cleaning	1	3
Communicating	1	3
Forgiving	1	3
Guidance	1	3
Heavenly bodies	1	3
Life	1	3
Nature	1	3
Phenomena	1	3
Repairing	1	3
Time	1	3
Traffic	1	3
Travelling	1	3
War	1	3
Work	1	3
Agriculture	0	0
Coming	0	0
Confirmation	0	0
Disasters	0	0
Duties	0	0
Education	0	0
Emotions	0	0
Information	0	0
Learning	0	0
Lottery	0	0
Mind	0	0
Observations	0	0
Preventing	0	0
Renting	0	0
Technology	0	0
[Unknown]	5	13
Total	38	100

* A zero (0) indicates that the category was mentioned as a secondary one only.

Generic paranormal topics

The paranormal topics were further sorted into ten generic categories: occultism, organizations, paranormal information, paranormal principles, paraphysical phenomena, parapsychic phenomena, persons, religion, research on paranormal, and spirituality (see Table 26). Again, ”paraphysical phenomena” was definitely the central subject, manifesting in two out of three cases. The occurrence of the other themes was minimal;

many of these — occultism, paranormal information, persons, and research on paranormal — did not even achieve the status of a primary topic. The scarcity of received information on parapsychic phenomena is again a mystery.

TABLE 26. Generic paranormal topics of information and their definitions (n=31)

*Generic paranormal topic**	*Definition***	*f****	*%*
Paraphysical phenomena	•paranormal phenomena having physical qualities or effects*****	21	68
Parapsychic phenomena	•paranormal phenomena based on consciousness*****	3	10
Organizations	•organizations dealing with the paranormal	2	6
Paranormal principles	•supernatural laws which govern life	1	3
Religion	•exoteric belief systems and practices involving the supernatural without perceived occurrence of paranormal phenomena	1	3
Spirituality	•”search for purpose and meaning involving both transcendence […] and immanence”******	1	3
Occultism	•esoteric belief systems and practices involving the supernatural without perceived occurrence of paranormal phenomena	0	0
Paranormal information	•information about the paranormal, or information acquired by paranormal means or from paranormal source	0	0
Persons	•people involved with the paranormal	0	0
Research on paranormal	•systematic study of supernatural issues	0	0
[Unknown]	[paranormal topic unclear]	2	6
Total		31	100

* Source: Kari 1996, 82, 185-187.
** These are not based on the empirical data, but on the large body of literature about the paranormal.
*** A zero (0) indicates that the category was mentioned as a secondary one only. **** See Kiviniemi 1998, 34.
***** Source: Decker 1993, 34.

When the topics of received information (in Table 26) and information needs (in Table 9) are compared, it becomes immediately obvious that the subjects of information exhibited a much greater variety than those of needs. In fact, most of the topics of information — organizations, paranormal principles, persons, religion, research on paranormal, and spirituality — were absent from the needs, although it must be acknowledged that they appeared to be of minor importance. The subjects of obtained information included all of the four generic topics of needs. The ten regions virtually cover the whole array of existing paranormal subjects (cf. Kari 1996, 82, 185-187). The frequencies of the four common topics were very much the same in the information and needs. Some lesser differences were the slightly higher number of ”parapsychic phenomena” in the information, and of ”paranormal information” in the needs. The class of ”unknown” themes was considerably smaller in the information than in the needs.

Specific paranormal topics

The generic topics set forth above were divided into their constituent parts, specific subjects, of which there were 21 (in Table 27). Among these, ”alternative medicine” and ”spirits & world of spirits” were the foremost topics, each accounting for nearly one fifth of all paranormal themes. Thus, their prevalence equalled that of ”health” on the normal side. ”UFOs & extraterrestrials” was the next most often mentioned subject with its share of about one eighth. Other topics occurred less frequently, and many were secondary themes only.

TABLE 27. Generic paranormal topics of information and their specific component topics (n=31)

Generic paranormal topic	*f**	*%*	*Specific paranormal topics*	*f**	*%*
Paraphysical phenomena	21	68	Alternative medicine	6	19
			Spirits and world of spirits	6	19
			UFOs and extraterrestrials	4	13
			Paranormal energies	2	6
			Objects other than UFOs	1	3
			Past lives	1	3
			Unidentified phenomena	1	3
			Spiritism	0	0
Parapsychic phenomena	3	10	Altered states of consciousness	1	3
			Channelling	1	3
			Extrasensory perception	0	0
			[Unknown]	1	3
Organizations	2	6	Organizations	2	6
Paranormal principles	1	3	Personal mission	1	3
			Divine blueprint	0	0
Religion	1	3	Religion	1	3
Spirituality	1	3	Spirituality	1	3
Occultism	0	0	Magic	0	0
			Rituals	0	0
Paranormal information	0	0	Paranormal information	0	0
Persons	0	0	Persons	0	0
Research on paranormal	0	0	Research on paranormal	0	0
[Unknown]	2	6	[Unknown]	2	6
Total	31	100		31	100

* A zero (0) indicates that the category was mentioned as a secondary one only.

The comparison of the specific paranormal topics of information (Table 27) and needs (Table 10) yielded the following results. Firstly, the assortment of the themes of information was much more heterogeneous and numerous. Secondly, most of the rarer subjects of needs were not primary topics of the received information. Thirdly, the rankings of the individual subjects diverged remarkably. ”Spirits & world of spirits” and ”alternative medicine” were the number ones in the information, but in the needs, they occupied the third and fifth position (”healing” being an instance of ”alternative

medicine"), correspondingly. In the needs, "UFOs & extraterrestrials" was the commonest topic, but only the third commonest one in the information.

Time Foci

Just like the information needs, the received information also focused on four relative times: past, present, future and timelessness. Information in the *past* tense could discuss a bygone life of the respondent's:

> "He said to me that — addressed me by 'old lady' — said 'the old lady didn't give U to him and … the old lady has so badly — it's finally that — and the old lady has been a eunuch' — in what B— this place I can't remember what it is. 'The old lady has been a eunuch.' He says I've been a eunuch … in some previous life …"
>
> *(Nelli 619-621)*

A *present*-time message talked about the person's current situation, for instance:

> "It just forbade my going there, that there's too thin ice there and well … I was with the dog then there on ice and it was spring. The dog rushed across the ice and the angel appeared there in the dog's tracks approximately that 'don't go here well this is — you'll sink there' and I then just said thanks and started off in another direction to the shore."
>
> *(Dagmar 34-35)*

The subject could also be enlightened by tidings concerning *future* eventualities:

> "And the message of theirs was that if the pollution of Earth's water systems continues, the arrival of UFOs on Earth will increase because the inhabitants of other planets have to do more tests with water and to clean water."
>
> *(Gaia 17)*

There appeared to be *timelessness* of two kinds: absolute and relative. Absolutely ageless information dealt with universal (cosmic) principles or laws, while a relatively timeless communication treated of cultural regularities, instructions, or regulations. The following representation of a cause-effect link probably manifested the former variety of agelessness:

> "It's been such … a weighty enough matter … like to me, that I've wanted to know it because I can remember the clear cause-effect relationship so well from the dream state that although I did test it there like at that moment in the dream that it works like this. Or when I saw — when I saw how it works like this or like that then I felt in it a clear like cause-effect relationship. --- — or in a way I saw a cause-effect so — and of course in what I saw I felt that — and even so strongly that I wasn't myself able to argue against it."
>
> *(Risto 708-710)*

A Time Focus was *unknown* when, for example, the utterance did not make sense:

> "I don't wanna become a healer of these he said that '---. The hospital comes after the sick, if only you command anyone.'"
>
> *(Nelli 376-377)*

The findings elaborated on the meanings of Time Foci once more (see Table 28). The discussion on the difficulties in determining the Time Focus of information needs is valid here, too. Again, the supernatural was exclusively involved with the past. The observation on transcendental life in the information needs also fully applies here, for paranormal time in information only concerned past lives. As Table 28 indicates, most often — every third time — the information was related to the present. The rest of the instances were distributed rather evenly according to their time of reference, with the past being just barely the least frequent Time Focus. This distribution is, however,

somewhat suspect due to the high number of unknown Foci.

TABLE 28. Time Foci of information and their features (n=76)

Time Focus	*Features*	*f*	*%*
Present*	•what is: time from narrow to broad ”now” (•incorporates some aspects of past or future)	26	34
Future*	•what will be •rooted or not rooted in present •certain or uncertain (•may announce exact time) (•may tell duration) (•may be about distant time ahead) (•may be rooted in past)	13	17
Timelessness	•what was, is and will be •universal principles •outside time (•cultural regularities) (•instructions or regulations) (•may relate to past or future)	12	16
Past*	•what was or has been (•linked to present, future, or another past event) (•may be about previous life) (•not linked to present) (•may be about distant past)	11	14
[Unknown]	[time not mentioned, speech unclear, or ambiguous or unintelligible expression]	14	18
Total		76	100

* Sources: Dervin 1983b, 16, 62; Dervin 1992, 75; Dervin *et al.* 1982, 430, 431.

The Time Foci were the same in the needs (Table 13) and information (Table 28). The order of the commonness of the four Time Foci here was similar to that of the information needs. This result, too, pretends to lend support to the proposition that the information that is got meets the need. Nonetheless, there were two major differences between the chronological distributions: the share of the foremost Focus, the present, was much less conspicuous in the information than in the needs, and the unknown Foci were that much commoner in the information than in the needs. These discrepancies remain unsettled as yet.

The innovation with Time Focus here is the fact that this subconcept has always been solely attached to information need (or gap). Yet, its duplication under the concept of information might prove beneficial. However, it is up to future explanatory research to be the judge of that.

Methods of reception

Generic methods

Yet another juxtaposition of normal and paranormal concerns the method of obtaining information from a source. At the general level, the means could be grouped into three types: normal, paranormal and seminormal (see Table 29 for explanations on these). These depict the human senses with which messages were received. Telephoning was a

normal mode of communication:

> ”As far as I can remember her — there was no telephone number in the magazine, but I got it — I called was it F Parapsychological Association — through there as far as I can remember I got her telephone number.”
>
> *(Cecilia 424)*

In the supposedly *paranormal* case, the participant was able to receive information without physical signals, for instance:

> ”It comes — should I say — it comes as words, which in a way well forth from my heart. So no voices which come from somewhere to my ear but it comes to my brain the words come one at a time like this, that is it comes here between my ears as information, and well — but as words too.”
>
> *(Laura 280-281)*

The *seminormal* method differed from the normal and paranormal ones. While the two others were seen as being based on direct communication between the source and the actor, the seminormal technique involved a medium who conveyed information from an assumed supernatural source to the individual:

> ”So so I then in F — my friend took me there … to this kind of person who sees and hears, so she then said all of a sudden that a person who has died last August — towards the end of August died is here.”
>
> *(Jenni 39)*

An *unknown* manner was one that was not revealed by the informant, for instance:

> ”And the more accurately I known about the matter myself, the more accurate information about this system of Spiritual Science I get then. And it’s now this — physics has always been my strong point, and in order to get — I’ve now got a lot about this spiritual physics information and the most than about any other discipline so as I myself know about physics a lot and study continuously and at this very moment concentrating on this quantum physics now I study this, so I get these matters of Spiritual Science related to quantum physics and now more accurate.”
>
> *(Ulla 122-123)*

TABLE 29. Generic methods of information reception and their definitions (n=76)

Generic method	*Definition*	*f*	*%*
Normal	•individual receives information through normal senses	42	55
Paranormal	•individual receives information through paranormal senses	22	29
Seminormal	•intermediary receives information through paranormal senses and conveys it to individual by normal means	11	14
[Unknown]	[method not mentioned, speech unclear, or expression inaccurate]	1	1
Total		76	100

As always, the method of information reception was examined as observed by the interviewee. If it is postulated that paranormal experiences in fact involve gaining knowledge via extrasensory or otherwise inexplicable means, this might happen when a sensitive person is open to information that cannot be obtained through normal senses at that point in space-time (Thalbourne & Delin 1994, 24). Such a mode of information transfer would often supposedly require a widened awareness on the part of the actor (Heikkilä 1998, 74). At the very least, the findings do not contradict this hypothesis. It is a potentiality that the putative paranormal and seminormal methods of information

reception represent ”new” ways of knowing.

Table 29 announces that normal methods were evidently the most conventional ones, as they were utilized in more than half of the cases. Paranormal techniques were the second most frequent means, while seminormal methods were the most unusual ones. Only in one instance could the mode of reception not be identified. This finding, too, is attention-grabbing in that information was apparently received by mysterious means fairly often.

Specific methods

The methods of information reception were also classified at a more concrete level, without regard to their perceived paranormality. A total of 12 manners could be discerned: channelling, dreaming, half-asleep, hypnosis, information field, listening, meditation, reading, spiritual world, telepathy, thinking, and watching. The empirical categories exposed by this piece of research should be familiar from everyday parlance, possibly excepting the techniques of channelling and information field. *Channelling* signified the felt communication of messages from another plane of existence directly to the recipient’s mind. *Information field,* in its turn, meant receiving information via an energy field that supposedly vibrates at an extremely high frequency which makes it imperceptible to the physical senses (Ulla 1, information 2 & 3B1). Paradoxically, the information field was judged to be a channel *and* source of information (see Table 16), even simultaneously. Both channelling and information field were perceived as something else than telepathy.

TABLE 30. Specific methods of information reception (n=76)

Specific method of reception	*f**	*%*
Listening**	32	42
Reading**/***	14	18
Telepathy	11	14
Dreaming	5	7
Watching	4	5
Channelling	2	3
Hypnosis	2	3
Information field	1	1
Meditation	1	1
Thinking**/***	1	1
Half-asleep	0	0
Spiritual world	0	0
[Unknown]	3	4
Total	76	100

* A zero (0) indicates that the category was mentioned as a secondary one only. ** Source: Kumpulainen 1993, 55.
*** Source: Dervin 1983b, 64.

The methods were not unidimensional, for about half of them worked in the normal waking consciousness, whereas the other half — namely dreaming, half-asleep, hypnosis, meditation, and spiritual world — involved an altered state of consciousness. Lewicki and others (1992, 796) reveal that the notion of man being capable of seeking and processing information in a nonconscious manner is in fact an underlying metatheoretical supposition of nearly all present-day cognitive psychology (see also Harmon & Ballesteros 1997). Even though those psychologists actually talk about subconscious information acquisition, the idea might be extended to other non-ordinary states of awareness, too. As is well known, altered states of consciousness are not, however, nonconscious. In dreaming, half-asleep or hypnosis, the actor is at least semi-conscious. What is more, a state of meditation or spiritual world entails the individual's full awareness. This is just different from our standard mental condition. The subconscious method of obtaining information was not touched on by the informants, because they could obviously not be cognizant of such incidents.

Of the modes at hand, only listening, reading and thinking have been studied before in information seeking research — for instance, by Kumpulainen (1993, 55) who views them as gap-bridging strategies (see also Dervin 1983b, 64). Another way to approach listening and reading would be to speak of them as "oral" and "written" communication after Wilson (1980, ch. 4), albeit these denominations do not quite reach the generality of the types recommended here. Future research on information seeking could benefit from examining the dialogic or even multilateral nature of informational interaction, instead of viewing information procurement as a one-way monologue from a source to the individual.

According to Table 30, the most common method of receiving information was simple listening (to another being) which occurred in under half of the transactions. Reading was the second most popular method, followed not far behind by telepathy. The least frequent methods were information field, meditation, and thinking which were each used but once. Half-asleep and spiritual world were not talked about as primary methods at all. In three cases, the means of reception remained unknown. As a rule, studies of information seeking have found that "word-of-mouth" communication is the principal means of conveying information (Voos 1969, 67), so the current result is no exception. The share of reading was almost exactly the same as in Kumpulainen's (1993, 55) thesis. However, this investigation does not comply with his (ibid.) finding that thinking would be the second most used mode of information acquisition. Here, thinking was in fact one of the rarest channels. This may be accounted for by the bias of focusing on external sources (see generic source types above).

Generic and specific methods

When the specific methods of information reception were aggregated under the generic methods, the result was Table 31. It tells us several things. First: listening, reading, thinking and watching are normal techniques; channelling, dreaming, half-asleep, hypnosis, information field, meditation, spiritual world, and telepathy can be regarded as paranormal modes; and listening and watching may also be seminormal methods. A few supernatural techniques — dreaming, half-asleep, hypnosis and meditation — might not be deemed paranormal by many scholars, because their existence is not debatable. In the current piece of research, they are nevertheless classified as paranormal, for they were certainly not considered as "normal" modes of obtaining information by the supernaturalists. This point is supported by Bem's and Honorton's (1994, 4) statement that the "laity" often regards "all exotic psychological phenomena as epistemologically equivalent", i.e. as "psychic".

Second, the most important discovery here was that it appears as though paranormal means of information reception are much more diverse than normal and seminormal ones in unison (see Table 31). Third, the data did not include the normal sense of feeling (as when a blind person reads braille), nor some means conceived as paranormal, like clairvoyance, precognition and retrocognition. Fourth, listening was the typical way of obtainment among the normal and seminormal methods, whereas telepathy was the number one paranormal method.

TABLE 31. Generic methods of information reception and their constituent specific methods (n=76)

Generic method	*f*	*%*	*Specific methods*	*f**	*%*
Normal	42	55	Listening	22	29
			Reading	14	18
			Watching	4	5
			Thinking	1	1
			[Unknown]	1	1
Paranormal	22	29	Telepathy	11	14
			Dreaming	5	7
			Channelling	2	3
			Hypnosis	2	3
			Information field	1	1
			Meditation	1	1
			Half-asleep	0	0
			Spiritual world	0	0
Seminormal	11	14	Listening	10	13
			Watching	0	0
			[Unknown]	1	1
[Unknown]	1	1	[Unknown]	1	1
Total	76	100		76	100

* A zero (0) indicates that the category was mentioned as a secondary one only.

A dependency

The *paranormality of topic* of information seemed to influence its *Time Focus* (see Table 32): with communications about normal themes, the Time Focus was clearly on the present, and timeless issues were peripheral. With the paranormal topics, timelessness was the most likely Focus, although not so distinctly; information of this sort dealt least with future.

TABLE 32. Paranormality of topic of information vs. its Time Focus* (n=61)

	Paranormality of topic					
	Normal		Paranormal		Total	
Time Focus	f	%	f	%	f	%
Present	18	53	7	26	25	41
Future	9	26	4	15	13	22
Timelessness	2	6	10	37	12	19
Past	5	15	6	22	11	18
Total	34	100	27	100	61	100

* Cramér's V = 0.44, p<.01.

Summary

The acquired information was conceptualized as topic, Time Focus, and method of reception (see Figure 10). A total of 76 pieces of information were examined.

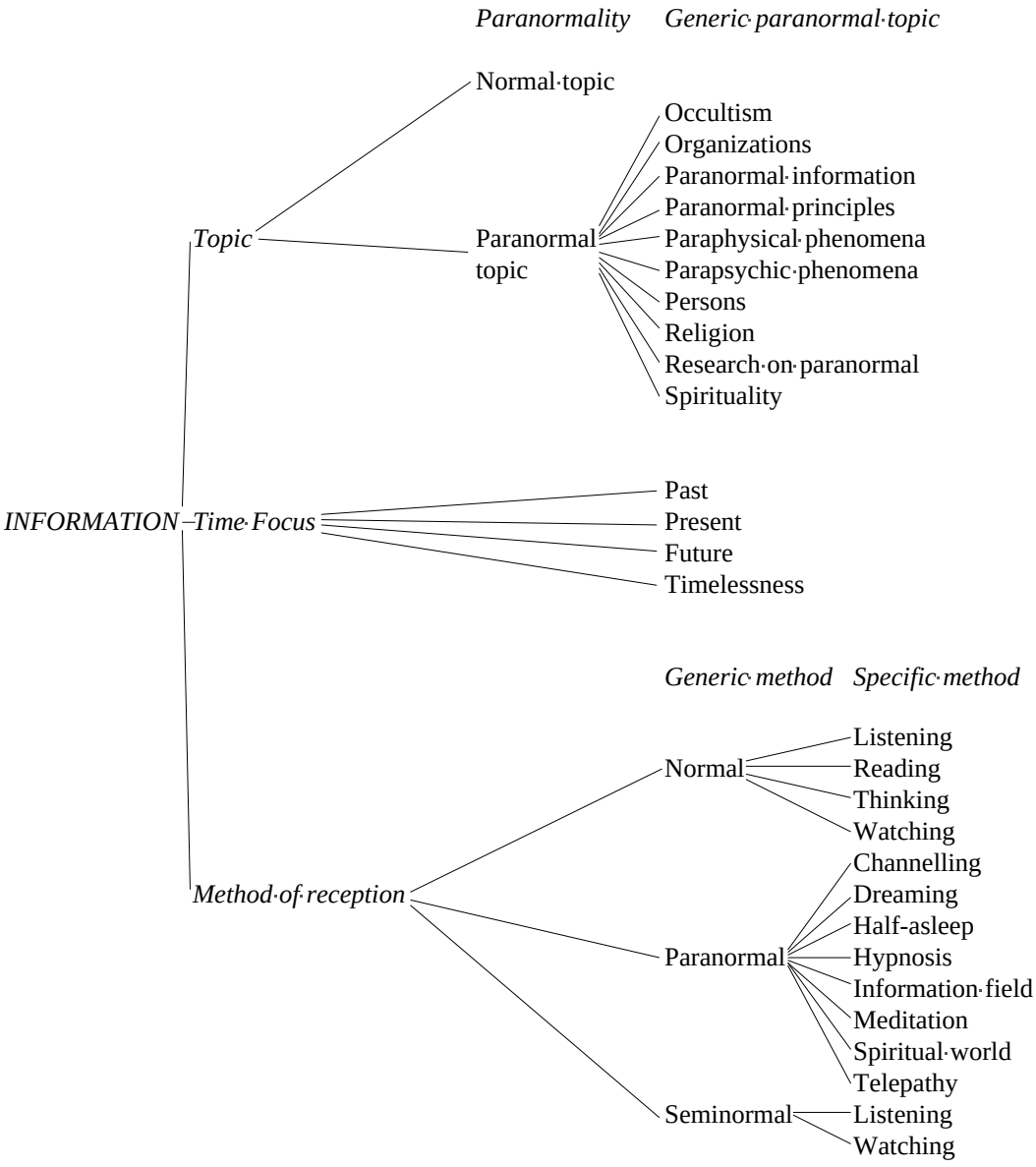

FIGURE 10. Conceptual taxonomy of information

6.5 Information outcomes

Information uses

Basic uses

To start with, all uses could be separated into two truly broad categories: mental and physical (see Table 33). These have earlier been termed ”thinking” and ”acting”, respectively, by Todd (1999a, 853; see also 1999b, 11). My fundamental classes highlight the seemingly dualistic worlds in which acts take place: *mental* application denoted action mainly by the person’s mind which was internal to his frame and imperceptible to others, whereas *physical* use imported action of the individual’s body

in particular that was conventionally perceptible to others. Of course, both types of information employment were accompanied by the other one, for there can be no physical acts without mentation, nor mental deeds without the functioning of the physical body. At least this is how present-day science sees the matter, although supernaturalists would indubitably disagree on the latter point. At any rate, when wielding information, either the mental or physical side was apparently more prevalent than the other. Although in this study, the only elementary division of information uses that seemed to make sense was that between mental and physical ones, it is up to future research to show how fruitful the classification proposed here is in actuality.

TABLE 33. Basic uses and their definitions (n=31)

Basic use	*Definition*	*f*	*%*
Physical	use occurring in physical world	24	77
Mental	use occurring in mental world	6	19
[Unknown]	[expression inaccurate]	1	3
Total		31	100

As Table 33 reveals, the great majority of information uses were physical by nature, with a share of some three quarters. Only every fifth utilization was mental. This might seem odd, given that bodily action must normally be planned and controlled by one's mind. However, the devotees of supernature evidently put more weight on what they can do with information carnally. Just one use could not be placed in either of the categories. The number of observed information exploitations was no more than 31, because I failed to distinguish between uses and effects in the interview phase (see section 4.2).

Generic uses

The basic uses operate at a very high level of abstraction, and so it was necessary to devise a little more down-to-earth classification. The solution was the typology of generic uses which consists of three types of application: communicating, doing and thinking (see Table 34). These hardly need to be defined. It was possible for *communicating* to occur as an act of expressing one's regret:

> ”I did apologize to him and I haven't seen him after that.”
>
> *(Nelli 717)*

Medicating oneself was a form of *doing:*

> ”Well … I did take the medicine but I didn't notice any effect.”
>
> *(Laura 452)*

Thinking is well illustrated by decision-making:

> ”But I myself did decide it in the end.”
>
> *(Cecilia 512)*

The use was designated *unknown* if, for instance, the individual did not pronounce how she concretely applied the information:

> ”But I at least for my part do forward this matter, because I feel them, that this is my like actual mission here now.”
>
> *(Ulla 118)*

Communicating and doing belong to physical uses, whereas thinking is practically synonymous with mental ones. I believe this is an exhaustive classification of all imaginable information employments. The difference between communicating and doing is that the former is an informational and social activity, while the latter is basically an energetic and personal one. Splitting physical uses in half has not been done in the past. However, the two types do bear a remarkably close resemblance to the two elementary relationships between knowledge and action, as identified by Tim Dant (1991, 201-203). Communicating can be viewed as ”discursive action” (see also Tuominen & Savolainen 1997, 87-91), and doing as a ”demonstration” of knowledge. It must be pointed out here that discursive action and demonstration are by no means limited to information exploitation only. They can in fact be understood as the two fundamental forms of physical action in general.

TABLE 34. Basic uses and their generic component uses (n=31)

Basic use	*f*	*%*	*Generic uses*	*f*	*%*
Physical	24	77	Communicating	15	48
			Doing	9	29
Mental	6	19	Thinking*	6	19
[Unknown]	1	3	[Unknown]	1	3
Total	31	100		31	100

* Source: Todd 1999a, 853.

Of these three groups (in Table 34), communicating was definitely the most common use, taking place almost every second time. Doing was the second most frequent utilization, as it occurred in more than one fourth of the cases. Thinking was the rarest sort of use.

Particular uses

Although the generic types of information uses help us understand the different kinds of usage, they are still far too rough to give us an idea of what they mean in practical life. This being so, the generic categories were divided into even finer classes called ”particular uses”. A total of 31 applications of all manner were found (see Table 35). It must be noted here that these are merely examples of information use, not a complete taxonomy of all possible utilizations. In reality, there must be an immense variety of uses. Intriguing deviants among them were *avoiding* and *non-doing* (under ”doing”): they highlight the alternative that shirking from something or not acting could also be kinds of information application. Some particular uses have been identified by previous authors. For example, information can be utilized in ”cognitive transformation, knowledge conversion, adaptation, reformulation, or re-invention” (Wingens 1990, 37). The trouble with practically all such outlines is the fact that they only talk about decidedly cognitive acts. In the study at hand, different uses of both the cognitive (thinking) and physical (communicating & doing) sort were detected.

By having been done nearly every fourth time, informing others was decisively the most usual form of use among communicating, physical uses, and information employments as a whole (see Table 35). Almost all other particular uses were manifested only once or not even as a primary exploitation. Within the class of doing, treating (medically) was the most typical (with its share of one tenth) use, although not by a wide margin. None of the usages among the thinkings was dominating, since the frequency of one was highest.

TABLE 35. Basic, generic and particular uses (n=31)

Basic use	*f*	*%*	*Generic uses*	*f*	*%*	*Particular uses*	*f**	*%*
Physical	24	77	Communicating	15	48	Informing	7	23
						Writing down	2	6
						Answering	1	3
						Apologizing	1	3
						Commanding	1	3
						Founding	1	3
						Helping**	1	3
						Playing pools	1	3
						Consoling	0	0
						Editing	0	0
						Forgiving	0	0
						Registering	0	0
						Unravelling	0	0
			Doing	9	29	Treating***	3	10
						Avoiding	2	6
						Cleaning	1	3
						Giving birth	1	3
						Non-doing	1	3
						Trading	1	3
						Going	0	0
Mental	6	19	Thinking	6	19	Clarifying	1	3
						Deciding	1	3
						Evaluating	1	3
						Studying	1	3
						Synthesizing	1	3
						Taking attitude	1	3
						Analysing	0	0
						Developing	0	0
						Orientating	0	0
						Reflecting	0	0
						Working****	0	0
[Unknown]	1	3	[Unknown]	1	3	[Unknown]	1	3
Total	31	100		31	100		31	100

* A zero (0) indicates that the category was mentioned as a secondary one only.
** By talking.
*** Nursing.
**** Labouring internally.

* * *

Due to an unfortunate flaw in the interview phase (see section 4.2), the analysis of information use chiefly had to lean on sporadic statements. Next time, the researcher must be sure to expressly ask every participant about the matter. This would probably yield a richer picture of utilizing information than ever, and possibly give rise to other dimensions along which to conceptualize uses.

Information effects

The data suggested a slight specification of this subconcept. Namely, the effects of information were not always direct consequences of the information in itself, but they could also be its indirect impacts, as mediated by information uses.

Helpfulness of information

The first task with the information helps was to determine the perceived helpfulness of the acquired information. Three categories emerged: helpful, not helpful, and undecided. In this extract, information was deemed *helpful*, for it saved the situation:

> ”Well … well I’d say ’rather useful’ because it worked in that situation but in my life I don’t consider it as awfully — for example these math … exercises I can always go and look up in in a book, if I really in my life encounter such things that I should solve something like this they don’t need to be in my head. But at that moment it worked so it was therefore really useful.”
>
> *(Dagmar 225-226)*

In the opposite vein, the partaker could regard the communication as *not helpful* when, for example, he did not get what he expected:

> ”Yes of course it --- as to other matters like that that could give useful information, but he in my opinion this guy didn’t give well anything — this was — I do have to emptily state here that ’rather useless’ or ’totally useless’.”
>
> *(Risto 936)*

The last type *(undecided)* denotes that the interviewee was not sure whether the information was helpful or not, maybe because she did not utilize it:

> ”*Was it of any help then in the end?”*
> ”Well I don’t know then — I didn’t do the thing anyway.”
>
> *(Cecilia 543-544)*

No examples can be given of the *unknown* category, since the classification of helpfulness under this denomination was by definition grounded upon the absence of data. Helpful and not helpful information basically mean the same as Wiio’s (1996, 32) ”useful” and ”useless” information.

TABLE 36. Helpfulness of information (n=56)

Helpfulness	*f*	*%*
Helpful	40	71
Not helpful	4	7
Undecided	2	4
[Unknown]	10	18
Total	56	100

Table 36 indicates that in most (just about three out of four) cases, information was judged helpful, and that information was rarely (in four occurrences only) not advantageous at all. In two instances, the interviewee was uncertain about the helpfulness of information. These figures are, however, undermined by the rather large proportion (nearly one fifth) of outcomes whose beneficiality was unknown.

Physicality of helps

The first glimpse of information helps was caught by looking at them in terms of their physicality — whether they were mental, physical, or not helps at all (see Table 37). Mental and physical contributions referred to the selfsame dimension as mental and physical uses: a *mental* help facilitated the actor’s psychological functioning, while a

physical help contributed to his corporeal performance. The evolution of the actor's outlook on life was a manifestation of a mental aid:

> ”There like … such a sharp turn took place that … when I found these books then my world view started to change little by little and as this also involved this kind of incident also along the way which in one way or another did affect … quite like this profoundly so that … there was rather a sharp turn in my life all in all.”
>
> *(Gaia 369)*

A physical benefit could be, for example, winning money on the pools:

> ”I do have almost every week won, so that the dream didn't bode rather ill at least.”
>
> *(Kalle 651)*

The category of *no help* was curious, thanks to the explanations given about why the information was not considered as helpful. For instance, a negative influence of the message cancelled out its positive impact, so that the final score was useless information:

> ”Well actually none — well like well then as for me, even now continually I have some kind of a feeling that … I got like that I'll make it yet, but then again as for my this husband I was loaded with a burden, so the whole thing then in that way was of no help.”
>
> *(Jenni 502)*

The next piece of speech does not specify exactly how the information helped the respondent, which earned the case the title of *unknown* help:

> ”Good to know. And this is in my opinion useful then again.”
>
> *(Risto 941-942)*

TABLE 37. Physicality of helps and its definitions (n=44)

Physicality of help	*Definition*	*f*	*%*
Mental	•information helps in mental world	34	77
Physical	•information helps in physical world	5	11
No help	•information does not help at all (•no personal benefit) (•information does not match need) (•information more harmful than helpful)	4	9
[Unknown]	[help not mentioned, or impossible to classify]	1	2
Total		44	100

On the basis of Table 37, it seems that the mental helps were the predominant kind, as they accounted for over three quarters of all aids. Physical helps were primary in only every ninth instance. Information outcomes without a benefit were just slightly less frequent. One help could not be identified. It is illuminating to notice that this result is an all but exact opposite when compared to that on the basic information uses (Table 33). Apparently the helps were chiefly mental, whereas the uses were mainly physical. Physicality is a new subconcept of information help.

Helps as movement

Earlier, estimable attempts at systematizing particular information helps have been

made at least by Reijo Kumpulainen (1993, 61-62) and Ross Todd[27] (1999b, 15). Both of these had to be rejected as such, however, for Kumpulainen's six classes are muddled, and Todd's five types only deal with cognitive benefits. The central organizing principle adopted here originates from a Sense-Making study which found that ”information seeking and use was seen as a means for moving” (Dervin 1983b, 19). This generated the idea of help as metaphorical movement relative to a situation, aspiration or characteristic of the individual. Four types of movement could be detected: advancing, continuing, getting out, and standing still (see Table 38). *Advancing* imported being able to make progress or achieve a goal. Here, the information user reached clarity about a topic:

> ”Well anyway I get … some … nuggets of information there. And I read enough books so these nuggets merge. It becomes clear information.”
>
> *(Paavo 163-165)*

Continuing, on the other hand, meant being able to go on along the same path, preserving the status quo. To take an example, the interviewee's earlier conceptions could be strengthened instead of changed:

> ”I was pleasantly surprised and like this again this information given by space friends was confirmed […] So like this I have all the time got like confirmation for this their — information given by space friends so this academic-level ordinary science is also beginning to get these this kind of results which space friends have earlier already told.”
>
> *(Ulla 569-570)*

When *getting out,* the person was able to break free from a bad situation. In this particular instance, a statement dispelled the participant's suspicions:

> ”Rather it's of help. At least I don't need to so much think about all then whether I'm loony or not.”
>
> *(Alli 915-916)*

When the person was *standing still,* the information did not facilitate movement, that is, it did not help the individual:

> *”Did this information help you?”*
> ”About these past lives it probably didn't.”
>
> *(Helena 452-453)*

It was beneficial to include this last instance in the typology in order to get the whole ”motion picture”. Finally, the way in which the obtained communication assisted the doer's movement remained *unknown* at times. One reason for this were his inaccurate words:

> ”… But I must here still stress that is … it is extremely useful but I must all the time separate that is … worldly knowledge and these religious matters that is … they aren't like directly applicable to worldly life so that like this like religiously extremely significant.”
>
> *(Eemeli 362)*

The aforementioned varieties of movement cover all the helps in the data of this study, although it is not certain if they constitute all possible motion types. Therefore, further inquiry is recommended. The four classes have affinities with Kumpulainen's (1993, 61-62) categories. Advancing is a more general term for Kumpulainen's ”enabled reaching goal/finishing task” and ”helped to get started”. Continuing is represented by ”gave support/certainty/confirmation” and ”made continue”. Getting out, in its turn, can be regarded as an abstraction of ”helped handle or avoid difficulties”. Standing still has no equivalent in Kumpulainen's taxonomy.

[27] Todd speaks about ”use”, but clearly refers to help.

TABLE 38. Helps as movement and its definitions (n=44)

*Help as movement**	*Definition**	*f*	*%*
Advancing	•being able to progress or reach destination	22	50
Continuing	•being able to keep going along same path	9	20
Getting out	•being able to escape from bad situation	7	16
Standing still	•information does not facilitate moving (•no personal benefit) (•information does not match need) (•information more harmful than helpful)	4	9
[Unknown]	[help not mentioned, or impossible to classify]	2	5
Total		44	100

* Following the theory of Sense-Making, these categories are represented in a partially metaphoric guise.

From Table 38, we gather that advancing was the most frequent help, since it occurred in precisely half of the instances. Continuing, with its share of one fifth, was the second commonest contribution, succeeded by getting out. In contrast with all these, information failed to move the actor quite rarely — on the average, once in eleven cases. Two helps were unfeasible to categorize as a certain sort of motion.

In outlining the relationship between helps as movement and physicality of helps, the solution shown in Table 39 is proposed: the types of motion are subsets of mental and physical aids, although this could also be the other way around. It appears that the three different helps as movement retained their order of frequency regardless of whether one inspected the mental or physical benefits.

It is rather obvious that the kinds of motion presented here are not the same as in situations — to be precise, in generic Situation Movement States — although they are related. Advancing, continuing, and getting out could be thought of as free or restricted movement, and accordingly, standing still might be likened to a stopped situation. Wrong way, on the other hand, would not be considered as a help, but rather as a hurt. This connection might also be worth pursuing in a follow-up study.

Particular helps

The informational advantages were further decomposed into concrete sorts. The 27 helps (in Table 39) that were discovered were heterogeneous enough. The concept of help is a creation of Sense-Making, so it is only natural that the categories also issue from research conducted in that area. A miscellany of some twenty down-to-earth contributions has been dug out in earlier investigations (see lists in Cheuk & Dervin 1999; Dervin 1989b, 222; Dervin 1992, 75). Since the helps here diverge considerably from the old ones, there is no point in comparing them in detail. This disparity is a symptom of the relatively small worth that analysis has at this level of abstraction or — should I say — concretion. True, Sense-Making help categories obviously convey to us a versatile image of meaning effects, but Dervin has not pondered on how systematically the classification depicts the consequences of communications (see Savolainen 1999b, 103). Thus, the actualized particular aids are to be mainly treated as samples of an infinite universe of potential helps, and as fodder for higher level typologies.

From Table 39, we can observe that getting understanding was the foremost particular (and also advancing and mental) help by having been mentioned in nearly one fifth of the cases. Getting confirmation and ”no help” were the runner-ups, although far behind with their shares of one eleventh. Most of the remaining advantages only occurred once. Among the continuing helps, getting confirmation was the number one

particular benefit, and dismissing from mind was barely the most common help in getting out. The prevalent physical help could not be nominated due to the scarcity of contributions of this kind.

TABLE 39. Physicality of helps, helps as movement, and their particular helps (n=44)

Physicality	*f*	*%*	*Movement*	*f*	*%*	*Particular helps*	*f**	*%*
Mental	34	77	Advancing	19	43	Getting understanding	8	18
						Changing	3	7
						Gaining belief	2	5
						Learning	2	5
						Becoming interested	1	2
						Developing	1	2
						Getting incentive	1	2
						Discovering	0	0
						[Unknown]	1	2
			Continuing	8	18	Getting confirmation	4	9
						Getting support	2	5
						Feeling positive	1	2
						Remembering	1	2
						Tolerating	0	0
			Getting out	6	14	Dismissing from mind	2	5
						Being awakened	1	2
						Being liberated	1	2
						Feeling relieved	1	2
						Getting straight	1	2
						Becoming clear	0	0
			[Unknown]	1	2	[Unknown]	1	2
Physical	5	11	Advancing	3	7	Becoming easier	1	2
						Finding	1	2
						Getting reward	1	2
			Continuing	1	2	Dodging	1	2
			Getting out	1	2	Getting rid	1	2
						Completing task	0	0
						Recovering	0	0
No help	4	9	Standing still	4	9	No help	4	9
[Unknown]	1	2	[Unknown]	1	2	[Unknown]	1	2
Total	44	100		44	100		44	100

* A zero (0) indicates that the category was mentioned as a secondary one only.

Hurtfulness of information

So far, I have only seen one single empirical study which examines the harmful effects of information. This is Kumpulainen's (1993) graduate thesis. Unfortunately, he was

unable to scrutinize the hurts in any detail, because they were so few in number. That is why a ready typology was not available, and I had to assemble ones by deriving them from the data. As with the information helps, it was useful to find out first how ordinary information harm actually was. To this end, each outcome was classified according to whether it involved a hurt or not. A *hurt* could be anxiety, for example:

> ”Well it didn’t do harm any more than that except for the fact that when I myself think I know more than others, it does arouse anxiety if others don’t believe in it, so there’s no other inconsistency in this whole … subject area except that it arouses anxiety when … you know that … others are sceptical and … doubt that a thing like that isn’t possible, that it’s only my own imagination and …”
>
> *(Gaia 531)*

When there was *no hurt*, even negative outcomes could be seen in a positive light:

> ”Well no harm but of course well indeed we had a hard time then so these experiences which then — at which she then already hinted or gave information about well we’ve had really bad experiences, and we’ve had to dig a lot into things I also think that all those I take as such development then really that apparently I have to … learn things hard here to be able to move forward … in my development. But I can’t say harm, on the contrary I consider it as quite beneficial.”
>
> *(Dagmar 387-388)*

Again, there were outcomes whose hurtfulness was *unknown.* Alas, no examples can be given of this category, because it was by definition grounded upon the absence of data. Figure 11 announces that the information outcomes were usually (in over half of the instances) accompanied by no hurt. Merely about one sixth of the results involved harm of some kind. However, these figures are not very reliable, since the proportion of the unknown outcomes in this regard was a good quarter. In Kumpulainen’s (1993, 62-63) investigation, only three information hurts were detected in 46 situations, which means that about every 15th case ended badly. This would suggest that in connection with the paranormal, the received information may have harmful effects more frequently than on the average. If this is true, it would be imperative to find out the underlying causes for its hurtfulness.

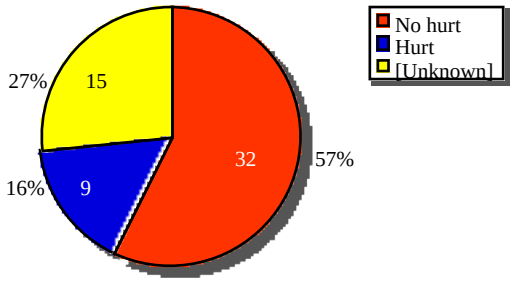

FIGURE 11. Hurtfulness of information (n=56)

Generic hurts

As the harm was investigated, it was at first divided in the by now familiar fashion, into mental and physical hurts, as well as ”no hurt”. *Mental* harm often appeared as a disagreeable state of mind. It could manifest itself as fear or uncertainty, for instance:

> ”Well … it was in my opinion rather useless, in the sense that the book stirred a little like fear and uncertainty.”
>
> *(Gaia 299)*

In this group of participants, the *physical* hurts did not actually mean corporal injuries, but rather that the harm occurred in the actor’s physical and frequently in his social

environment in particular. Being harassed by others is a good example:

> ”Well, perhaps the only disadvantage is that it’s a rather dangerous mission because there’ve been quite many opposing right from the beginning and every now and then opposing persons who wish to oppose this mission of mine and attack me spiritually, psychologically or physically, or just follow.”
>
> *(Ulla 639)*

Of course, material damage could manifest itself in a bigger corpus. When the information did *not hurt*, this was often expressed in very definite terms:

> ”No it didn’t cause any trouble. No, no harm. None … whatsoever.”
>
> *(Cecilia 726-728)*

Table 40 exhibits a pattern similar to the one in Figure 11 — only here it is even more pronounced: the information outcomes typically entailed no harm to the interviewees, for a massive four fifths of the consequences were hurt-free. The few mental and physical disadvantages were nearly equal in number.

TABLE 40. Generic hurts and their definitions (n=41)

Generic hurt	*Definition*	*f*	*%*
Mental	•hurt occurring in mental world	5	12
Physical	•hurt occurring in physical world	4	10
No hurt	•information does not harm (•on the contrary: information is helpful) (•individual does not regard difficult experiences as harmful) (•at least no personal hurt)	32	78
Total		41	100

Specific hurts

The generic harm had to be broken down into more specific hurts to make sense. The interview material yielded a total of 13 different disadvantages (plus no hurt; see Table 41) which in my opinion only represent the tip of an iceberg. All in all, the mental hurts appeared to be more varied than the physical ones. ”More work” seemed to be the most frequent harm, but this result might be attributed to chance, since the hurts were so few in number. Many disadvantages were only mentioned in passing. A study concentrating on information hurts would be necessary to enable the scholar to analyse them more systematically. In the spirit of Sense-Making, such inquiry might endeavour to probe harm from the perspective of metaphorical movement, for example.

TABLE 41. Generic hurts and their specific component hurts (n=41)

Generic hurt	*f*	*%*	*Specific hurts*	*f**	*%*
Mental	5	12	Anxiety	1	2
			Depression	1	2
			Fear	1	2
			Irritation	1	2
			Pressure	1	2
			Loss of faith	0	0
			Torment	0	0
			Uncertainty	0	0
Physical	4	10	More work	2	5
			Being ridiculed	1	2
			Being spied on	1	2
			Loss of speech	0	0
			Opposition by others	0	0
No hurt	32	78	No hurt	32	78
Total	41	100		41	100

* A zero (0) indicates that the category was mentioned as a secondary one only.

Positiveness of information effects

In order to get a general picture of the helpfulness or hurtfulness of information, we must compare the helps and hurts on equal terms. In essence, this means that each outcome was designated as primarily helpful, hurtful or neither. In a given case, the consequence could include a help or hurt or both, or neither.

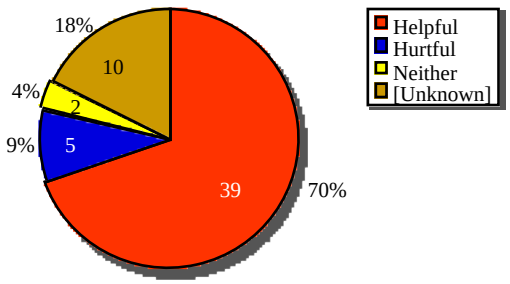

FIGURE 12. Overall positiveness of information effects (n=56)

As Figure 12 demonstrates, the outcomes were deemed helpful in more than two thirds of the cases, which is a crucial finding. About every eleventh effect was mainly regarded as hurtful. The consequences which were neither useful nor damaging were very rare indeed, because only two such instances were found. Regrettably, almost every fifth outcome was left unknown from this point of view. Since the positivity of information effect is another novel subconcept, more research is needed on it.

Paranormality in outcomes

The supernatural appeared to be least prominent at this last stage of information action. As a matter of fact, paranormal consequences were alluded to so rarely that there was no point in contrasting them with normal ones. A supernatural phenomenon was really judged probable or at least possible only in the *information uses*, on three separate occasions. One case was a person taking homeopathic medicine to treat her malady

(Laura 2, outcome 1), another one was an individual healing the sick with her hands (Nelli 1, outcome C), and the third one was a personage apologizing to a spirit for her ancient deeds (Nelli 4, outcome 2).

Many of the *information effects* were, however, connected to the paranormal on the plane of ideas. Coming to believe in the gift of healing (Nelli 1, outcome C) was an instance of a help like this. On the other hand, feeling anxiety because others did not credit the informant's knowledge obtained from paranormal beings (Gaia 1, outcome 2) would be a sample of a hurt.

These observations cannot by any means be contrasted with earlier discoveries, either, since no research has been conducted on the facet in question. I must remark that the dimension of supernaturalness was not paid explicit attention to in the interviews. It is quite conceivable that a systematic analysis of the perceived paranormality of information outcomes would disclose the various ways in which the supernatural is sensed to manifest itself, and its ”true” commonness, in this phase of the process.

Summary

The outcomes of information were represented by the concepts of use and effect (see Figure 13). The study incorporated 56 singular consequences.

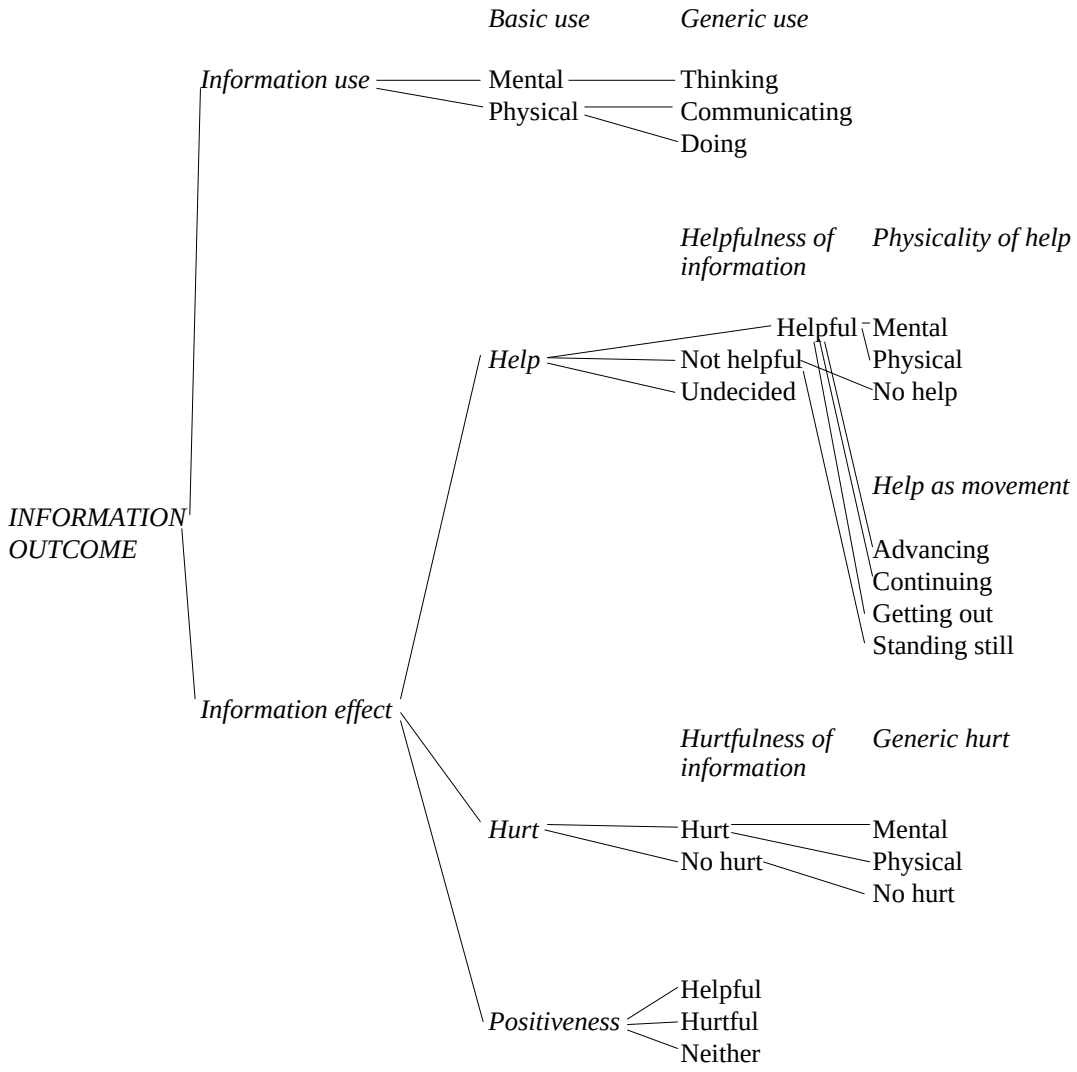

FIGURE 13. Conceptual taxonomy of information outcomes

Distinguishing between information use and effect may be felt as problematic, but they

do have a couple of identification marks by which to tell them apart. In the use, the person does something to or with the knowledge, whereas in the effect, the knowledge does something to him instead. Moreover, a use is neutral, while an effect is either positive (help) or negative (hurt) — or both — from the actor's point of view.

6.6 Barriers to information seeking

Types of barriers

Specific and particular barriers

At first, the various hindrances were categorized at an intermediate level into 16 *specific* barriers: consciousness, contacting, disinterest, economy, information, intellect, interaction, negativity, physics, primitiveness, psyche, reception, rules, sensitivity, time and understanding (see Table 42). Paranormality was apparently concerned in only one of these: *consciousness*. A couple of informants thought that their inability to transcend their normal state of awareness or five senses presented an impediment. This assortment constitutes a wider array of barriers than what is conveyed in the literature (cf. e.g. Brown 1991, 12-13; Dervin 1973, according to Chen & Hernon 1982, 19). Yet, there may also well exist other bars that were not present here. One has a reason to suspect this, because the barriers were tapped with an alternative choice question. The next time around, it would be more appropriate to make use of an open-ended query.

Table 42 shows that of the specific barriers, intellect and psyche were the most common ones, each accounting for one fifth of all obstacles. Also reception and interaction proved troublesome. On the other hand: consciousness, disinterest, primitiveness, rules and sensitivity were a major hindrance only in one instance each. Just one of the barriers could not be identified. This finding differs from that in my master's thesis (Kari 1996, 109-110) in which physical barriers were deemed most frequent impediments to information seeking. It may be that this discrepancy reflects the peculiar natures of situational versus habitual information seeking. That is, the physical accessibility of information could be felt as more pressing when the need is not acute. Many of the more frequent specific barriers could be further divided into *particular* ones which can be seen in Table 42, too.

TABLE 42. Specific types of barrier and their definitions, and constituent particular barriers (n=81)

Specific barrier	*Definition and particular barriers*	*f*	*%*
Intellect*	•limits of one's cognitive abilities -lack of knowledge -lack of understanding -forgetting -ignorance of foreign language -rejection of thought -lack of education -wrong idea	15	19
Psyche*	•one's personality and affect -lack of faith -neglect -fear -unwillingness -lack of courage -egoism -being too strong-willed -lack of concentration -disagreement -not being habit -intensity of experience	15	19
Reception	•difficulties in getting information -lack of information -restricted access -high price -sluggish provision -sporadic provision	13	16
Interaction	•hindrances in communication with source -source's lack of time -lack of interaction -disturbance by another -one's dismissal -bad service	10	12
Physics*	•limits of one's physical capabilities -body's disobedience -being tied down to location -body's lack of endurance -being sick -no transportation -no accessories -limited capacity of accessories	5	6
Information	•problems with content or form of information -chaos -inconceivableness -uncertainty -untruthfulness -contradiction -obsolescence -subjectivity -unethicalness	4	5

(continues)

TABLE 42. (continued)

Specific barrier	*Definition and particular barriers*	*f*	*%*
Contacting	•impediments in getting in contact with source	3	4
Economy	•one's financial status	3	4
Negativity	•others' antagonistic attitude	3	4
Time**	•temporal factors related to oneself -slowness -lack of time	2	2
Understanding	•others' limited ability to comprehend	2	2
Consciousness	•limits of one's awareness -inability to attain altered state of consciousness -inability to control mental content -limits of senses	1	1
Disinterest	•others' lack of concern	1	1
Primitiveness	•civilization's lack of sophistication	1	1
Rules	•society's regulations	1	1
Sensitivity	•delicate nature of subject matter	1	1
[Unknown]	[barrier unclear]	1	1
Total		81	100

* These are from Dervin (1973, according to Chen & Hernon 1982, 19), although the terms are somewhat different.
** See Brown 1991, 12.

Generic barriers

Things got more manageable and interesting when the specific barriers were grouped into four more generic types: cultural, institutional, personal and social (see Table 43). *Cultural* limitations were ones imposed by the society to which the individual belonged. The specimen below shows how unsophisticated Earth technology posed a hindrance:

> ”For example the density of electrons, protons and others like these like with a hand-held gauge somewhere in terrain this kind of device doesn't necessarily exist to my knowledge as yet, for instance. There are these great tunnels or these impacters and this kind of particle accelerators with which these particles can be studied and made smaller and like this but they're — you can't take them like this in your pocket and go at least on the spot to do research. And they don't like necessarily measure the density or such, but what it becomes when made smaller, taken apart, so it doesn't necessarily measure that either.”
>
> *(Ulla 826-828)*

Institutional barriers were impediments involving sources or providers of information. For example, locating reliable information could be troublesome:

> ”If I merely search for information about them that I've first let's consider that I've had a particular experience on a certain day, then it's extremely difficult to get information. If we consider just one thing only if let's say if you like precisely this that I've been taken on board some craft and brought back then I won't get information on such a thing anywhere that what they

> are and how they are and … and do they exist for they are denied by one acknowledged by another third says nothin'. You can't get information about them. It is indeed rather complicated to get information on one given thing. There isn't any."
>
> *(Alli 224-228)*

Personal barriers, in their turn, were ones originating with the actor himself. An instance of such an obstacle was the partaker's ignorance of the subject matter:

> "I don't myself know what — like I at the beginning also … explained it that is shared it --- at this moment I'm seeking, and … like this."
>
> *(Risto 920)*

Social barriers were hindrances that were caused by relationships between the person and other people. This sample suggests that individuals coming from different discourse communities have trouble communicating with each other:

> "Them Christians have all these religious terms, so if you talk to them about these things then you have to use the same kind of religious terms as they themselves use. The same things are actually talked about but different terms are used. In a similar fashion the scientific circles have their own terms, 'uantums and electrons and whatever these kind, and likewise these spiritual circles have in turn these astral planes and all these. So I've had to find out each of the different — these are clearly three different fields — I've found out the terms and vocabularies of each of these three different fields, and I talk to them about these same things with their own vocabulary, so then they accept and understand me and receive the information better. If I go to talk to some Christian about a UFO then they at once say that 'oh, you're a Satan worshipper', but if you go and say that 'I come — I get messages like from God or an angel' then she: 'Hey, tell me too.'"
>
> *(Ulla 799-803)*

TABLE 43. Generic types of barrier and their specific component types (n=81)

Generic barrier	*f*	*%*	*Specific barriers*	*f*	*%*
Personal*	41	51	Intellect	15	19
			Psyche	15	19
			Physics	5	6
			Economy	3	4
			Time	2	2
			Consciousness	1	1
Institutional**	30	37	Reception	13	16
			Interaction	10	12
			Information	4	5
			Contacting	3	4
Social***	7	9	Negativity	3	4
			Understanding	2	2
			Disinterest	1	1
			Sensitivity	1	1
Cultural****	2	2	Primitiveness	1	1
			Rules	1	1
[Unknown]	1	1	[Unknown]	1	1
Total	81	100		81	100

* Sources: Wilson 1980, ch. 4; Wilson 1981, 8; Wilson 1994, 33; Wilson 1997, 42; Wilson 1999b, 252; Wilson & Walsh 1995, 4.
** Source: Dervin 1973, according to Chen & Hernon 1982, 19.
*** Source: Wilson 1997, 42.
**** Source: Johnson 1996, 93.

The sole *unknown* barrier was thus named, because the interviewee did not explain why she failed to get the answer from the first two sources of information:

> ”--- did I call two different places in U? I — two places in U and then … I can’t remember if it was an editorial office of a magazine was in F but in any case this was this third then I guess this — when I called that Q Association in F.”
>
> *(Cecilia 492-494)*

All of the four restriction types have already been identified by previous authors. Cultural barrier is mentioned by Johnson (1996, 93) in his book. It means practically the same as Dervin’s (1973, according to Chen & Hernon 1982, 19) ”societal barrier”. Institutional barrier, in its turn, is a direct borrowing from Dervin (ibid.). Personal barrier is one class in Wilson’s (1980, ch. 4; 1981, 8; 1994, 33; 1997, 42; 1999b, 252) as well as Wilson’s and Walsh’s (1995, 4) arsenal. Social barrier is also spoken about by Wilson (1997, 44). These four sorts of stumbling block do not, I believe, cover all possible obstructions. Other imaginable barrier types might be organizational and dimensional checks. As one may notice, the main thread underlying the generic (and basic) barriers is the entity or entities who cause the handicap or within which the obstacle springs up.

It appears from Table 43 that the personal barriers constituted the greatest obstruction after all, because half of all barriers were of this sort. The institutional bars were also noticeable with their share of good one third. On the other hand, the social and particularly cultural barriers were quite unusual. The infrequency of a social hindrance is rather surprising, considering the tender nature of the paranormal. It might be worthwhile to find out how big a problem social barriers are to newcomers to the domain of supernature, to those who have no paranormal experiences, and to those who hold a superficial interest in the subject matter.

Among the personal barriers, intellect and psyche were decidedly the commonest handicaps (see Table 43). Of the institutional barriers, reception and interaction turned out to be the most usual hindrances. The most frequent social barrier seemed to be others’ negativity. The cultural impediments were so rare that the prevalence of their specific barriers could not be determined.

Basic barriers

The generic barriers presented above could be examined at an even higher level of abstraction where only two types remained: others and self (see Table 44). *Others* incorporates all limitations which were mostly given rise to by other people. They include the cultural, institutional and social barriers. *Self* encompasses obstacles that were mainly generated by the individual himself. In practice, these were the same as personal barriers. Obstructions have not been perused in such abstract terms before.

Here (in Table 44), one’s self was the predominant barrier, although others hampered information action almost as often. This result agrees with the notion that the human being is by no means an optimal seeker of information (Rouse & Rouse 1984, 131), because our capabilities are limited at best (Wilson 1977, 53). However, Brenda Dervin criticizes thus far the majority of information studies for siding with the system: the inaccessibility of information is too often attributed to the deficits of the inquirer. This has lead into ”conjuring” an assortment of personal factors which could hinder one’s information seeking. (Dervin 1999b, 744.) Dervin’s reproach is not justified at least in the case of this investigation. First of all, the current piece of research can hardly be accused of being allied with the ”system”. Second, the difficulties in information action were not ascribed to individual defects by me. Rather, it was the respondents who did so. Third, the various personal barriers were not ”conjured”, but instead surfaced from the confederacy of theory and data. It really appears that an aspect of one’s self was seen as the foremost obstruction to information action. Of course, it is anybody’s guess if this circumstance is an objective fact or a reflection of blaming oneself for troubles. Furthermore: who knows — perhaps the pattern is different in other areas of life. Among the ”others”, institutional barriers were the most frequent type of generic

limitations.

TABLE 44. Basic, generic and specific types of barrier (n=81)

Basic barrier	*f*	*%*	*Generic barriers*	*f*	*%*	*Specific barriers*	*f*	*%*
Self	41	51	Personal	41	51	Intellect	15	19
						Psyche	15	19
						Physics	5	6
						Economy	3	4
						Time	2	2
						Consciousness	1	1
Others	39	48	Institutional	30	37	Reception	13	16
						Interaction	10	12
						Information	4	5
						Contacting	3	4
			Social	7	9	Negativity	3	4
						Understanding	2	2
						Disinterest	1	1
						Sensitivity	1	1
			Cultural	2	2	Primitiveness	1	1
						Rules	1	1
[Unknown]	1	1	[Unknown]	1	1	[Unknown]	1	1
Total	81	100		81	100		81	100

Summary

Barriers were conceived as type and stage (in information seeking) (see Figure 14). Their categories were discussed here, but their phases will be analysed in section 7.2, together with the stages of processes. The number of examined obstacles amounted to 81.

Barrier to information seeking is not to be confused with barrier situation. The latter is an overall context which may affect many facets of the person’s life, whereas the former generally refers to a particular information searching episode only, and is of direct consequence solely to his informational activities. It is, of course, possible for these two obstructions to occur simultaneously, but it must be kept in mind that in such a case the barrier to information seeking is always embedded in the barrier situation.

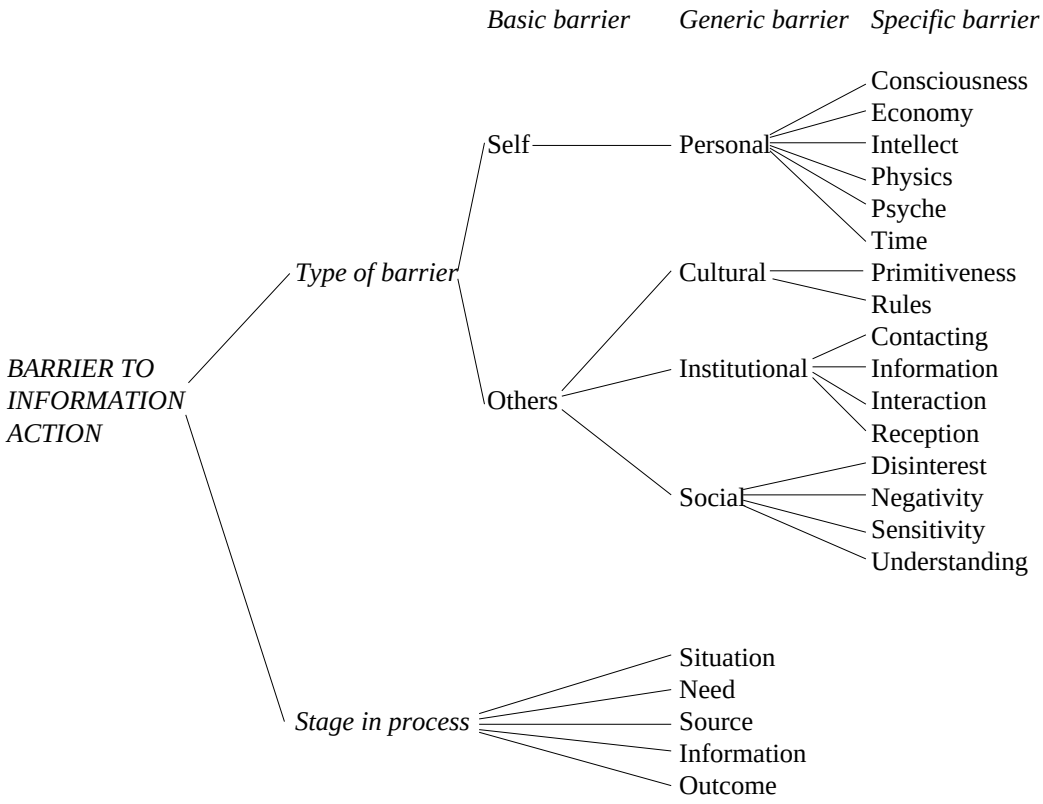

FIGURE 14. Conceptual taxonomy of barriers to information seeking

6.7 Interdependencies

This section narrates which variables appeared to affect which in other stages. Only the statistically and otherwise most significant covariations have been picked here.

Situation

The situation depended on the preceding source and information (see Tables 48 & 49). It seemed to affect at least the information need and attained information.

Information need

As Table 45 indicates, the perceived *paranormality* of the situation had a bearing on the *paranormality of topic* of the information need: in the normal circumstances, answers were chiefly required about normal themes, whereas in the paranormal situations, supernatural subjects of needs were somewhat prevalent.

According to Dervin (1991, 67), the actor's *Situation Movement State* correlates with his *5W Focus.* However, Kumpulainen (1993, 64) was unable to make out a clear connection between these two phenomena. The piece of research at hand did not find such a dependency with 10W Focus, either.

TABLE 45. Effect of paranormality of situation on paranormality of topic of need* (n=46)

	*Paranormality of situation***					
	Normal		Paranormal		Total	
Paranormality of topic	f	%	f	%	f	%
Normal	13	87	13	42	26	56
Paranormal	2	13	18	58	20	43
Total	15	100	31	100	46	100

* $\phi = 0.42$, $p<.05$. ** The category of ”undecided” has been excluded due to its rarity.

Information

There was a link between the *paranormality* of situation and the *paranormality of topic* of the information acquired, as well (see Table 46): in the normal conditions, communications were mainly about normal subjects, but in the paranormal situations, topics were more often supernatural. It is totally logical that the need should generally echo its origin, and that the information should pertain to the motive for which it has been obtained.

TABLE 46. Effect of paranormality of situation on paranormality of topic of information* (n=54)

	*Paranormality of situation***					
	Normal		Paranormal		Total	
Paranormality of topic	f	%	f	%	f	%
Normal	20	77	11	39	31	57
Paranormal	6	23	17	61	23	43
Total	26	100	28	100	54	100

* $\phi = 0.38$, $p<.05$. ** The category of ”undecided” has been excluded due to its rarity.

* * *

The dependencies discovered here closely match previous notions. Leaning on prior research, it may be maintained that information action is situational activity (see Dervin 1989a, 80; Savolainen 1995b, 261; Savolainen 1999b, 100, 101). At least information needs are tied up with the situation in which they are born (Chen & Hernon 1982, 9; Hewins 1990, 165; cf. Sonnenwald 1999, 182). Likewise, individual knowledge is always contextual (Buckland 1991b, 356-357; Kando 1994, 22), for as Brenda Dervin (1991, according to Perttula 1994, 39) remarks, ”knowledge is always ’created’ for a particular situation”. In other words, dissimilar senses of the same information are made in dissimilar situations by the same person (Kumpulainen 1993, 4).

Information need

The information need appeared to primarily depend on the previously obtained information and the situation (see Tables 50 & 45). It was not observed to have a definite influence on the other stages. It seems curious that there was no statistical connection whatsoever between the *topic* of need and information, or between the

theme of preceding and following need. In practice, this means, for example, that when the person wanted knowledge on the paranormal, it was equally probable that the answer he received concerned either natural or supernatural affairs. In this respect, one may conclude that information in the context of the supernatural often misses or surpasses the need. The reason for these irregularities would be one target that demands more scrutiny. The *Time Foci* of needs and information appeared to coincide, but the small number of observations did not grant this statistical significance. There was no dependency detected between the Time Focus of previous and consequent needs.

These results diverge from earlier views. The Sense-Making theory claims that information seeking and use, as well as their success, can be predicted on the grounds of the gap or information need (Dervin 1989a, 80; Dervin 1992, 66, 82; Dervin *et al.* 1982, 427; see also Belkin & Vickery 1985, 11-12; Line 1974, 87; Rich 1997, 18). It is likely that turning to a particular sort of source depends on the information requirement (Laitinen *et al.* 1991, 3). Furthermore, ”each type of [information need] requires its own kind of information” (Frants & Brush 1988, 89). This was not the case in the present study, for which some possible explanations are offered in the above paragraph and below in the subsection dealing with the outcomes.

Information source

The source was decisively affected by none of the other stages of information action. It evidently had an impact on the information and the following situation.

Information

The observed *paranormality* of source very intensely covaried with the *generic method* of information reception, as can be seen in Table 47: when dealing with the normal sources, communications were conventionally received through normal means, and supernatural methods were not utilized even once. However, when the paranormal sources were consulted, the typical way of information transfer was definitely considered as a paranormal one, and seminormal techniques were the marginal ones here. This makes sense, for only sources seen as supernatural often lack a corporeal form with which to confer physically. The correlation is the strongest one in the whole study.

TABLE 47. Effect of paranormality of source on generic method of information reception* (n=75)

	Paranormality of source					
	Normal		Paranormal		Total	
Method of reception	f	%	f	%	f	%
Normal	39	80	3	12	42	56
Paranormal	0	0	22	85	22	29
Seminormal	10	20	1	4	11	15
Total	49	100	26	100	75	100

* Cramér’s V = 0.89, p<.001.

Situation

A relationship between the perceived *paranormality* of source and the *paranormality* of the following situation was discovered (see Table 48): the use of normal sources tended to lead to normal situations, while paranormal sources would usually lead to situations

conceived as paranormal. The underlying reason for this is not clear — there may be an intervening variable at play here. On the other hand, an opposite influence was not detected. That is, the observed paranormality of the situation did not determine the supernaturalness of the source(s) employed in that situation. This is yet another enigma.

TABLE 48. Effect of paranormality of source on paranormality of subsequent situation* (n=29)

	Paranormality of source					
	Normal		Paranormal		Total	
*Paranormality of situation***	f	%	f	%	f	%
Normal	10	67	3	21	13	45
Paranormal	5	33	11	79	16	55
Total	15	100	14	100	29	100

* $\phi = 0.46$, $p<.05$. ** The category of ”undecided” has been excluded due to its rarity.

Information

The received information was affected by the previous information, situation and source (see Tables 51, 46 & 47). The information, in its turn, had an impact on the next situation, information need, and information.

Situation

The *paranormality of topic* of the acquired information appeared to covary to a moderate degree with the perceived *paranormality* of the next situation (see Table 49) so that information with a normal theme was much more likely to lead into normal situations than into paranormal ones. In equal proportion, the communications that were about the supernatural were prone to lead to paranormal situations. The most probable reason for this pattern is that when a piece of information indeed gives rise to a situation, the knowledge at least in part functions as a foundation for construing the circumstances in which the individual resides and the goals that he wishes to attain. In other words, one might say that in such a process, an epistemological matter becomes an ontological one. From this angle, it is not at all incredible that information on the supernatural should lead to a reportedly supernatural situation, for example.

TABLE 49. Effect of paranormality of topic of information on paranormality of subsequent situation* (n=28)

	Paranormality of topic					
	Normal		Paranormal		Total	
*Paranormality of situation***	f	%	f	%	f	%
Normal	12	75	3	25	15	54
Paranormal	4	25	9	75	13	46
Total	16	100	12	100	28	100

* $\phi = 0.50$, $p<.05$. ** The category of ”undecided” has been excluded due to its rarity.

Information need

A dependency was detected between the *paranormality of topic* of the information and the *paranormality of topic* of the following need, as Table 50 shows: when the theme of information was normal, the topic of the subsequent need was generally also normal. But if the information had a paranormal subject, the next need was more often than not about the paranormal, too.

TABLE 50. Effect of paranormality of topic of information on paranormality of topic of subsequent need* (n=37)

	Paranormality of information					
	Normal		Paranormal		Total	
Paranormality of need	f	%	f	%	f	%
Normal	14	78	6	32	20	54
Paranormal	4	22	13	68	17	46
Total	18	100	19	100	37	100

* $\phi = 0.46$, $p<.05$.

Information

The *paranormality of topic* of the information turned out to affect the *paranormality of topic* of the subsequent information (see Table 51): when the subject of the first piece of information was normal, that of the second one would also be normal in most instances. Correspondingly, if the former piece of information was about the paranormal, so would the latter one be.

TABLE 51. Effect of paranormality of topic of information on paranormality of topic of subsequent information* (n=45)

	Paranormality of information 1					
	Normal		Paranormal		Total	
Paranormality of information 2	f	%	f	%	f	%
Normal	16	80	8	32	24	53
Paranormal	4	20	17	68	21	47
Total	20	100	25	100	45	100

* $\phi = 0.48$, $p<.01$.

* * *

The two foregoing covariations could be interpreted as signs of the continuity of information action: the process often revolves around the same theme, without suddenly turning into something completely different. However, this reading is undermined by the observed discontinuity exhibited by the information needs (see above). Hence, more research on the relationships between needs and information is required to allow us to decide which conclusion is closer to the truth.

There was no discernible covariation between the *Time Focus* of information and that of the subsequent need, but the Time Focus of the preceding and following piece of

information often seemed to be in accordance with each other. This relationship, although technically significant, was weakened by the scarcity of observations.

Johnson (1996, 137) asserts that choosing an information source frequently depends on the information obtained from the previous originators. This view is not corroborated by the study at hand.

Information outcome and barrier to information seeking

Due to the experimental nature of these constructs, no statistically significant dependencies could be found with them. Hence, there were no findings to contrast with earlier conceptions. There are some indications of the *information use* being influenced by the information need (see subsection above on needs) and source (Rich 1997, 20). In comparison, however, most researchers suppose that knowledge utilization is independent of the absorbed information (see ibid., 11). Applying information is alleged to have an effect on ensuing needs and seeking (Limberg 1998, 20; see also Belkin & Vickery 1985, 11-12). Further research is sorely required to establish the relationships of outcome and barrier with the other elements of information action.

Summary

The subsequent statistically significant connections were unearthed between the variables reflecting the essence of information action: Situation Movement State and motive for action, type of source and paranormality of source, paranormality of source and tactic of seeking, type of source and chooser of source, paranormality of source and chooser of source, topic of information and Time Focus of information, paranormality of situation and topic of need, paranormality of situation and topic of information, type of source and method of information reception, type of source and paranormality of situation, topic of information and paranormality of situation, topic of information and topic of need, as well as topic of preceding information and topic of following information. Figure 15 presents the observed associations between the five stages of information action. An arrow marks the direction of influence by a phase on a subsequent stage.

Some generic connections between the various components of information action have been detected or at least suggested by scholars before. A couple of them (situation → need & situation → information) could be confirmed, whereas most (need → source, need → information, need → outcome, source → outcome & outcome → need) could not. On the other hand, the investigation at hand revealed several apparent impacts (source → information, source → situation, information → situation, information → need & information 1 → information 2) which have not been discerned previously.

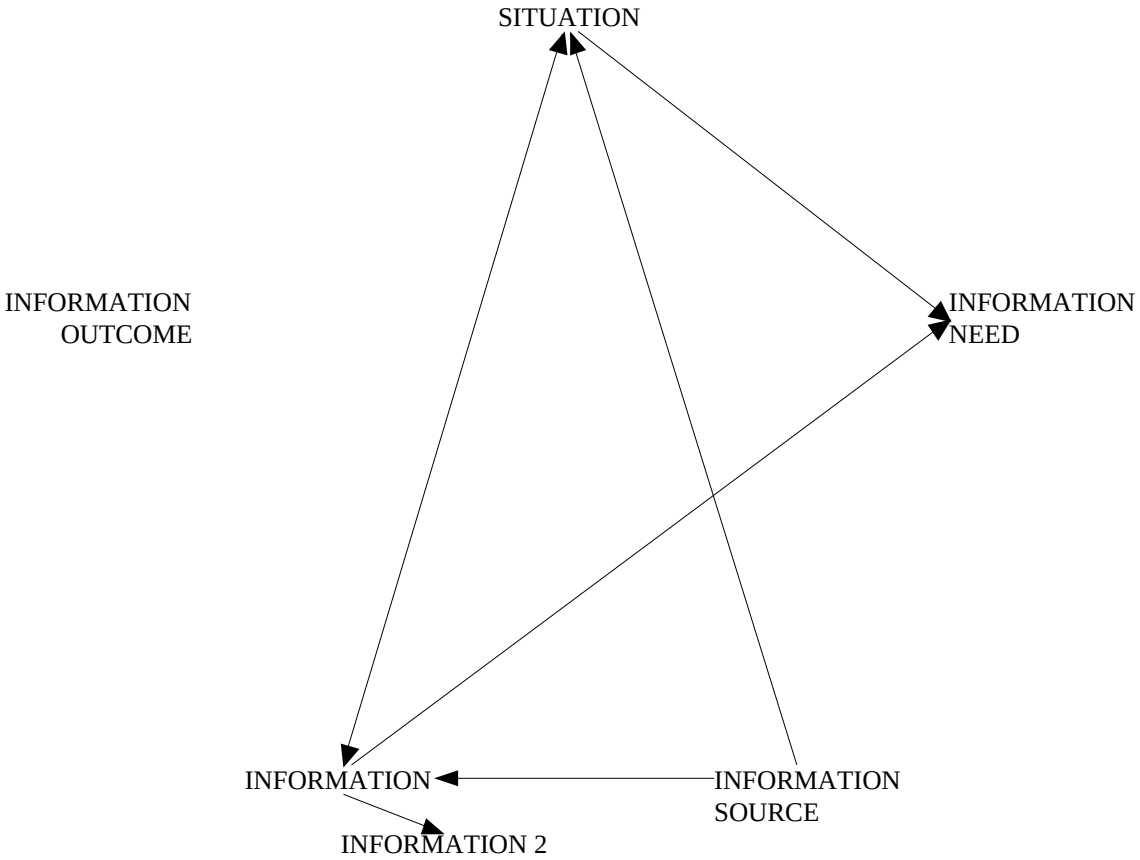

FIGURE 15. Statistically significant relationships between stages of information action

Dervin (1991, 67; 1998) claims that across all Sense-Making studies, situation has been the chief determinant of information seeking and sense-making. I would like to draw attention to the fact that in this piece of research, nearly all statistically significant relationships deal with the distinction between the normal and paranormal. This suggests that paranormality was a central factor in determining at least the content of information action. It even seemed to take precedence over situational considerations. Thus, there is cause for asking if the sphere of the supernatural involves rigidities — as perceived by people — which make information action somehow more predictable across time-space, and less susceptible to temporary conditions. This matter ought to be probed further.

7 Process of information action

This chapter recounts, interprets and deliberates all the results of the research concerning the form of information action. It commences with an overture to fundamental process dimensions, and then marches on to peruse the prime affair — the processes of information action. Since no accurate research questions on processes could be posed, and because the processes proved more versatile than expected, the analysis is by and large limited to descriptive examination. The presentation proceeds in the simple order of increasing complexity.

7.1 Dimensions

Two basic dimensions along which the examination was feasible emerged from the interview material. I would call them *unit* and *scope* of process. The primary mode of analysis was to scrutinize the various units, although the scopes were manifested in the investigation, as well.

Unit of processes

This dimension involves structural entities which were processes of information action as such, but usually also parts of larger processes. Five types of process unit were analysed: stages, need processes, situation processes, situation chains, and whole processes. *Stages* were the basic elements of which all the higher forms of process were comprised. This piece of research incorporates five phases of information action: situation, information need, information source, information, and information outcome. *Need processes* were the next rung on the ladder of comprehensiveness, for they were made up of one information need and all other stages (except situations) that related to it. One or more need processes taking place in the same situation formed a *situation process*. This also included the phase of situation. A *situation chain*, in its turn, was composed of all successive situation processes which belonged to the same continuum. A *whole process* contained one or more parallel situation chains that were interconnected. This sort of process was the widest-ranging possible.

The exemplar in Figure 16 illustrates the discussion herein. It exhibits an entire process of information action as perceived by Cecilia, one of the participants in the study. At the *stage* level, this story of hers goes through 21 phases as follows. The whole affair in a way started with Cecilia suffering from a chronic back pain (Situation 1A), albeit this state stayed in the background for a long time. While she was still ailing, she began to think about changing her career (Situation 2A). This was the circumstance which really sparked off information action. She wished to ascertain whether she was going to do the right thing or not (Need 1A). She wanted to call a particular clairvoyant, but she did not know her phone number. So Cecilia needed to find out that first (Need 1B), and consequently contacted a parapsychological association (Source 1). She got the number (Information 1) that she was looking for, and was able to dial the psychic (Source 2A). This individual recommended Cecilia to change her occupation (Information 2A), but in the end, she did not have the courage to go along with the plan (Outcome 2A).

Hence, Cecilia continued at her old workplace, until she heard vague rumours that the employers would get the sack (Situation 2B). This time, she desired to know how long they could keep their job (Need 1C), so she phoned the same clairvoyant (Source 2B) again. She told Cecilia about losing her post (Information 2B), which confirmed her earlier presentiments (Outcome 2B). On the same occasion, however, the psychic also remarked about the weak condition of Cecilia’s back and encouraged her to seek medical care (Information 2C). It is noteworthy that this instruction was given

unsolicited, i.e. even though Cecilia did not say anything about her back trouble. The advice made her realize the seriousness of her problem to which she had not paid much attention so far (Outcome 2C). Even then, she did not go to the physician at once. Instead, she waited and waited, until her back practically collapsed (Situation 1B). Now she had no choice but to turn to doctors (Source 3). They uttered that she would have to take rehabilitative treatment (Information 3). Unfortunately, before she got that far, the company in which she was employed went out of business, and she lost her job (Situation 2C). This made the rehabilitation impossible, but instead she started to do extensive and regular exercises with the dorsum on her own (Outcome 3). Thus, the final score was that she was out of work, but at least she could manage with her back.

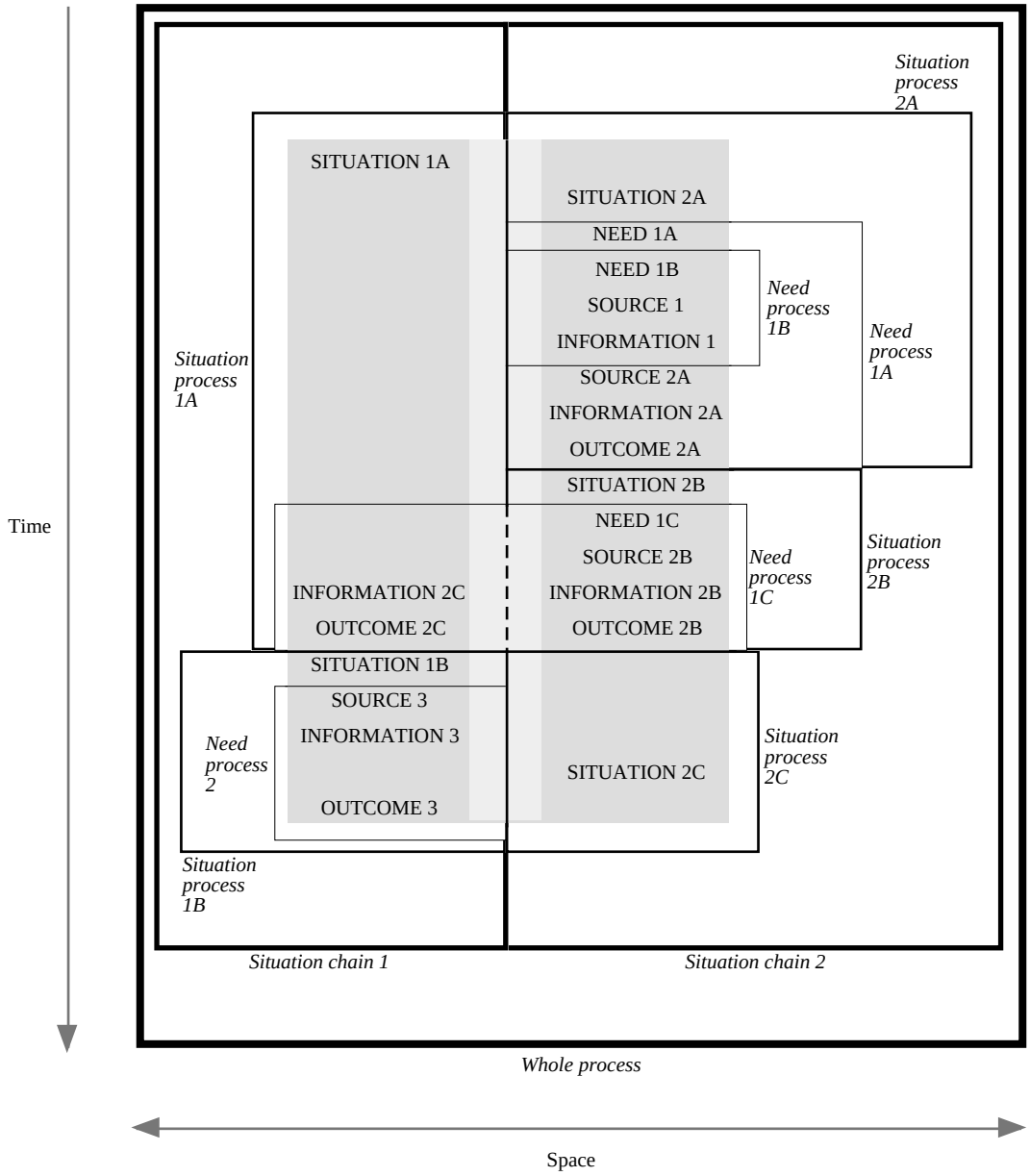

FIGURE 16. Example of whole process with various specified units in chronological order (source: Cecilia)

Cecilia's narrative contained four *need processes* within five *situation processes.* First, she needed to find out about the correctness of her scenario (Need process 1A). Before this could be accomplished, however, she had to dig out the seer's telephone number (Need Process 1B). These episodes of information seeking were meant to facilitate

Cecilia's decision on her career change (Situation process 2A). When her position began to look insecure (Situation process 2B), she craved for more accurate information on the future of her work (Need process 1C). While pursuing this foreknowledge, she also incidentally obtained counsel relating to her long-term back affliction (Situation process 1A). When her dorsum finally could not take it any more (Situation process 1B), she was forced to consult medical practitioners (Need process 2). During this process, she got the sack (Situation process 2C). This event did not appear to involve any information action.

Cecilia's account was composed of two parallel *situation chains.* One dealt with her health problem (Situation chain 1), and the other one was concerned with her working life (Situation chain 2). The former course of events proceeded through two situation processes, and the latter one advanced through three situation processes. Together, the two situation chains formed a *whole process,* because they interacted with each other during the third need process and the last situation processes.

Scope of processes

This dimension refers to the extent of activities in and the time frame of the process in proportion to the human life span. This point of view could not be studied systematically, because it did not surface until late in the analysis. Nevertheless, by inquiring into what the interviewees said about ”process”, ”stage” and ”step”, a five-class typology — depicting the scopes of processes — could be identified: micro-, meso-, macro-, mega- and superprocess. These were not necessarily processes of information action, but human processes in general.

A *microprocess* was a series of acts or events which took place at a concrete micro-moment, probably within a period of seconds or minutes. In terms of information action, a microprocess roughly equalled one stage — or two, as in the case of source and information, since information acquisition occurs in interaction with the source. The following excerpt talks about a session of meditation:

> *”How much trouble did you go to to get the information?”*
> ”Well let's say that this 'rather much' because I concentrated on it that is … I invested all my energy in it it can be said like this, so I really concentrated on it, but of course I can't say 'very much' because I didn't take any physical pains, so that it would've — I just sat there but it was a big thought process that is such a big mental process, so there wasn't anything else … well … I had to invest in it.”
>
> *(Dagmar 252-253)*

A *mesoprocess,* in its turn, was a chain of microprocesses that occurred closely together, but over a longer time period, like hours or days. In our field of study, a process of this kind is usually a need process, or a process of information seeking:

> ”Well, at the point where library catalogs and books have run out then I must begin asking if they don't have anything else newer information in existence some new books catalogs for example … and those magazines I can see too they have sometimes them catalogs where I can also obtain some old books.”
>
> *(Alli 854)*

A *macroprocess* contained one or more mesoprocesses, but it was more than just the sum of these. What bound this process together was a theme that arose from the goal that the person was trying to achieve. A process of this type had a discernible beginning and end, and its duration could be anywhere from days to years. A situation process, situation chain, and whole process could all be macroprocesses. The next instance is about solving a problem:

> ”First of all it hasn't been a matter which would've required immediate solution but it's been … a rather long-time process.”

(Sampo 69)

A *megaprocess* could comprise one or more macroprocesses or just mesoprocesses, and again, it was not reducible to its parts. This process was an undertaking which lasted for most of the individual's lifetime, and as such, had no definite commencement or completion. As with the macroprocesses, a megaprocess could be anything from a situation process to a whole process. The example below describes a process of lifetime learning:

> "The matter isn't actually any longer such a great problem. That how like far I'm like going in the process but it … how should I put it … that I can take it rather easy. In other words a very calm attitude, and it's no problem, how far I get in these principles."
>
> *(Eemeli 296-298)*

Finally, a *superprocess* was a truly large-scale progression which transcended the actor's lifespan, for its time frame could vary from decades to centuries. In effect, this meant that the individual's action could be seen as a part of this gigantic succession of eventualities that did not pertain to one person only, but to a collective. That is, the actor proper in this process was the collective, although concrete acts were naturally performed by its individual members. The following specimen discusses the potential evolution of scientific research on the unexplained:

> "… I like believe in the final analysis in the world of spirits too and in this kind of like these ghosts, so if I call them then — at some point this will be unravelled so — I always believe in that it's not a mystical thing, such a matter that well then which could not be explained."
>
> *(Risto 437)*

However, superprocess can be interpreted from another angle, as well. This concerns the belief in man's immortality. It is common knowledge that paranormalists generally view their present earthly life as either a fall from Heaven (incarnation) or a lesson among many (reincarnation). Although this did not manifest itself in the data, one can extrapolate that the individual may regard a personal process of his as a step in a superprocess in the sense that he assumes it to potentially affect his afterlife and perhaps also his next physical lives. In this case, the actor proper would presumably be the spirit who uses a material body to fulfil itself. Here too, the person would solely have an access to a portion of the total process during his lifetime. All in all, then, a superprocess could be considered by the individual as transcending his existence either physically or spiritually.

7.2 Stages

Single stages

The stages of information action got several attributes: number, stage of barrier, number of entities, and recurrence. Altogether there were 299 individual phases.

Number

The five stages — situation, information need, information source, information, and information outcome — that formed the cornerstones of analysis need no introduction. The stages were distributed in the way shown in Figure 17. The pieces of information and sources were most numerous, whereas the situations, needs and outcomes were clearly less in number. This result is probably biased, however, because not enough attention could always be paid during the data gathering to digging out all needs and outcomes related to situations, sources or information.

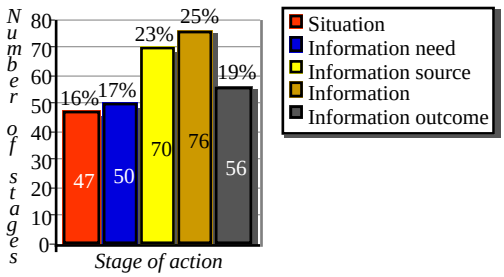

FIGURE 17. Number of stages (n=299)

Stages of barriers

Barriers emerged not only in information seeking, but at all five stages of information action: situations, needs, sources, information and outcomes. When a *situation* held an impediment, it was often reckoned as a barrier situation (one sort of Situation Movement State). In this case, the informant ”dreamt” of experimenting with supernature, but she was forbidden:

> ”And I wasn’t allowed to partake in séances either. […] I wasn’t allowed to go there where everybody else.”
>
> *(Nelli 124, 312)*

Searching for information could be complicated by difficulties encountered by the actor in formulating his *information need:*

> ”I don’t myself know what — like I at the beginning also … explained it that is shared it --- at this moment I’m seeking, and … like this.”
>
> *(Risto 920)*

Or, the respondent’s interaction with an *information source* was hampered by a shortage of time, for example:

> ”Only that this S had so little time that I could have a so much longer chat with ’im, as it wasn’t any such official reception but it was such a quite …”
>
> *(Marjo 344)*

In the following excerpt, the limitations of the human being’s ability to receive *information* were a barrier to the protagonist:

> ”Within us there’s all knowledge in us it — they just can’t --- receive it, so nothing new like ever comes or has been that all, the whole universe is here the future and the past and all knowledge is here present with us, but we’re unable to receive it due to the limits of our own senses and then as we are so terribly egocentric and well this ego all the time dominates here so well we can’t hear or see it.”
>
> *(Dagmar 104)*

An *information outcome* — documenting the message, for instance — could be interfered with by oblivion, among other things:

> ”There was no trouble except that I really can’t remember all the things she said, so … that much I’ve written down about it just after waking up.”
>
> *(Gaia 508)*

It was noted that the barriers were not faced just *at* stages. They could actually impede either the successful completion of a phase, or the person’s movement from one stage to the next. The stumbling blocks were annexed to the phase with which they were mostly involved.

TABLE 52. Stages of barriers (n=81)

Stage of barrier	*f*	*%*
Information source	30	37
Information	27	33
Information outcome	13	16
Information need	7	9
Situation	4	5
Total	81	100

As Table 52 demonstrates, a source of information was the most likely (more than one in three) stage at which a barrier was encountered. Following not far behind, the second most common phase was information with which one third of the restrictions manifested themselves. There were some barriers with the information outcomes as well, but not many with the needs and situations. When Table 52 and Figure 17 are compared, it becomes evident that the bars were not distributed equally among the stages: the sources and information incorporated more barriers than on the average, whereas the needs and situations involved much fewer checks than their numbers would imply. Also, there were not quite as many barriers with the outcomes as there ”should” have been. A sceptical attitude is to be taken towards this distribution, since it is in all likelihood skewed to favour the sources and information. This is because the difficulties were methodically examined in connection with these two stages only. As a matter of fact, this narrowness of inquiry may also have limited — both qualitatively and quantitatively — the types of barrier (in section 6.6) which could be discerned.

Number of entities

I marked that it was common for the interviewees to talk about several entities together, as if comprising a single stage. This lead into tribulations in determining the primary value of variables. From the point of view of analysis, the easiest cases were habitually information sources. The *sources* that were consulted were not always solitary entities. ”Source” could namely also be used by the respondent as a denominator for a group of similar persons or objects which could be solicited at the same time or at different times. The reason for this clustering was generally a matter of convenience: the more similar source entities had been consulted, the less feasible it became to enumerate every specific instance. The number of entities varied between one and dozens. Particularly books were liable to be bundled together. An example of a source consisting of *one* entity would be a medium:

> ”One English medium was in U then came from my father, and surely never had we seen each other.”
>
> *(Taavi 87)*

When *more than one* entity constituted the source, this could be a group of diviners, for instance:

> ”Well, I don’t in that way well — as a matter of fact I went to an astrologer, and well … well then there at the Seminar for Spiritual Development there I then did ask well … a clairvoyant, about similar things, plus then we did tell fortunes by Tarot rea— Tarot cards there.”
>
> *(Marjo 122)*

Over two thirds (49) of all information sources were single-entity ones, while less than a third (21) consisted of multiple entities. If all individual entities had been calculated separately, the total number would probably have amounted to about twice as many, that is, to some 140 sources.

From the perspective of multiplicity, the hardest cases were possibly the situations which were at times viewed from more than one angle. It may be felicitous to ask here to what extent the dissimilar definings given by the participant bear witness to the heterogeneity of his way of thinking, and to what extent they actually exhibit notions emanating from various phases of the stage's "life". Because it can be difficult even for the respondent to decide in retrospect whether an early, intermediate or late apprehension of his was the most important one, the examination of stages as processes would be welcome. Then again, if the stage really contains separate entities (such as sources), it might be beneficial to tear these apart into individual phases. If this is not possible, it could be more sensible to treat the entities as a combinatorial stage than to take a couple of exemplars and leave the rest to their own devices. But then the participant ought to be questioned about which of the facets he quotes is the most central one in his perception.

Recurrence

Related to the multitude of entities was the less frequent recurrence of phases. The stages of information action had two options in this regard: either they occurred just once, or repeated themselves a number of times. All phases may recur — even situation which was not iterated in the data of this study. When the stage took place *one time*, it usually meant that either the phase was relatively complete and successful, or it was a failure not worth pursuing further. In the following case, the cause was in all likelihood the former one:

> "So it was just now is it a week or two ago when it was on telly such a programme."
>
> *(Alli 700)*

If the stage happened *more than one time*, this was often a sign that either one occasion was not enough and so additional "rounds" were necessary, or the phase was so successful that it was beneficial to actually do it again. The example below illustrates the latter circumstance:

> "I ac— all over the country of Finland — until now B is by far the northernmost where — that is — in Q — where I've been to give a lecture. And by f— in South Finland by far the southernmost is this F."
>
> *(Ulla 921-922)*

In the current investigation, the recurring stages were ordinarily treated as a single phase. However, it would be more correct to look at the particular (repeating) instances in their own right in order to expose the dynamics of iteration and development therein.

TABLE 53. Recurrence of stages (n varies; see Total)

	*Stage of action**							
	Need		Source		Information		Outcome	
Recurrence of stage	f	%	f	*%*	f	%	f	%
One time	48	96	57	81	65	86	37	66
More than one time	2	4	13	19	11	14	19	34
Total	50	100	70	100	76	100	56	100

* Situation is excluded, because it did not repeat.

Table 53 relates that the stages conventionally did not recur. Depending on the type of phase, however, the share of stages occurring more than once fluctuated between one third (outcomes) and one 25th (needs). It seems that among the five phases, information outcomes are most given to iteration. This implies that the same information may have several uses and/or effects at different moments in time.

Stages together

The relationships between the stages were measured by their relative position. Because of the assumed simplicity of these process units, no other measures could be devised.

Positions

The stages could occupy one or more of three relative positions in the process of information action: preceding, following and/or parallel location. A *preceding* phase was one which took place completely or partially before another, *following* stage. A preceding phase could also have a *parallel* stage that occurred at least roughly at the same time as the first mentioned phase. A following or parallel stage was commonly a preceding phase, as well, if it was followed or paralleled by yet another stage. These three positions are all depicted in the simple sample in Figure 18. In it, the information source was a preceding phase that was followed by three pieces of information. Information A can also be viewed as another preceding stage with two parallel phases (Information B and C), since it was the phase that started the series of parallel stages.

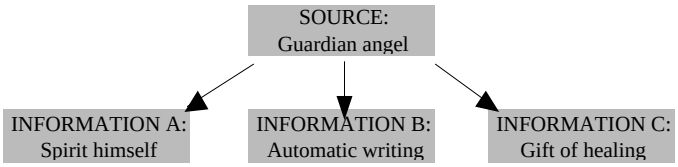

FIGURE 18. Example of preceding, following and parallel stages (source: Nelli)

Table 54 presents the shares of the five types of stages at the three relative locations. The portions did not diverge considerably from the averages of all phases taken together, except at the following points. First of all, among the *preceding* stages, the number of information outcomes was quite low. This was probably because the outcomes were often the last phase in the process, succeeded or paralleled by no other stage. Of the *following* stages, the situations were clearly less numerous than on the average. The reason for this seems rather obvious: the situations were usually located at the beginning of the process — not at the end, following other phases. Among the *parallel* stages, the share of situations and information sources was definitely below the mean. These figures indicate how rarely the situations and sources concurred with other stages. The sole situation that arose side by side with another phase happened in the case glimpsed in Figure 18 above. In it, the person obtained three pieces of information two of which led into a situation, so that two contradictory situations emerged simultaneously (Nelli 1, Situations 1 & 2). The stage which paralleled others most was information (see Table 54), as sometimes more than one communication was gleaned from a source. All in all, when the course of the processes is examined, some nine out of ten (265) phases furthered the process in a successive fashion, while about every tenth (24) stage proceeded along a parallel path. When evaluating these findings, it must be borne in mind that there may well have been unnoticed gaps in the processes. Therefore, because some stages could have been missed, these results must be treated as mere preliminaries.

TABLE 54. Relative positions of stages (n=299)

	Position of stage							
	Preceding		Following		Parallel		All stages	
Stage	f	%	f	%	f	%	f	%
Situation	51	19	27	10	1	4	47	16
Information need	43	16	47	18	6	25	50	17
Information source	74	27	63	24	3	13	70	23
Information	75	27	74	28	8	33	76	25
Information outcome	31	11	54	20	6	25	56	19
Total	274*	100	265*	100	24	100	299	100

* These figures are different, because ”preceding” includes the stages preceding both following and parallel phases. These numbers are less than the total, since not all stages preceded or followed another phase.

Parallel relations

Five distinct relationships between the parallel stages were found: different sources, pseudo, same source, same whole, and spontaneous (see Table 55). The stages with *different sources* were either two information originators or two pieces of information acquired from two sources that were present at the same moment:

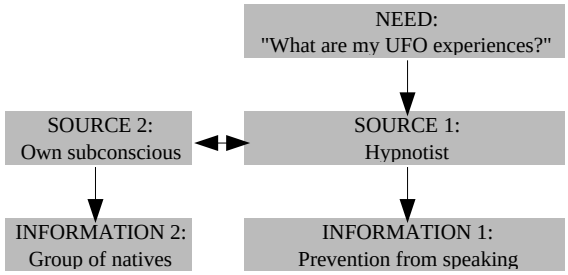

FIGURE 19. Example of stages with different sources (source: Alli)

Pseudo parallelism means that in the interviewee’s speech, the stages appeared concurrent, but in truth, their chronological simultaneity was questionable. This association principally manifested itself with information outcomes, for sometimes it was difficult to determine their exact relative timing:

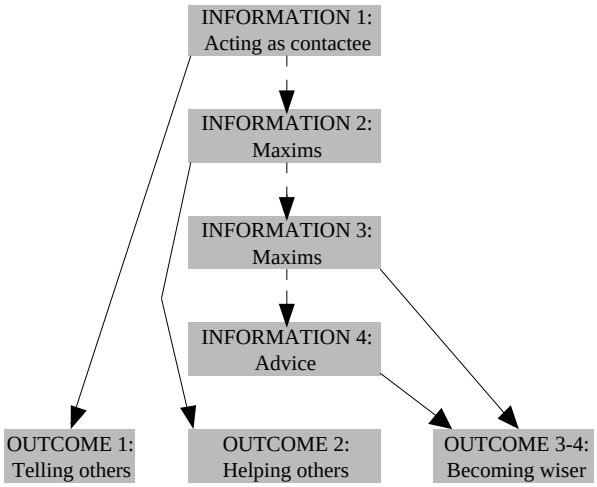

FIGURE 20. Example of stages with pseudo parallelism (source: Paavo)

The stages with the *same source* were either parallel separate pieces of information, outcomes, or situations that originated with the same source of information:

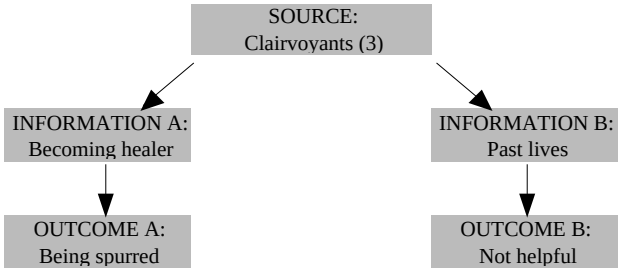

FIGURE 21. Example of stages with same source (source: Helena)

Somewhat akin to this were the stages that belonged to the *same whole*. These were parallel related information needs which together formed a larger whole:

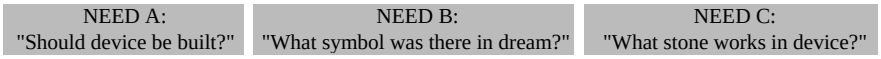

FIGURE 22. Example of stages as parts of same whole (source: Risto)

The *spontaneous* concurrence of an information need took place ex tempore, as the interviewee was in the middle of the arising of a situation or the reception of information. The next specimen exhibits the former incident:

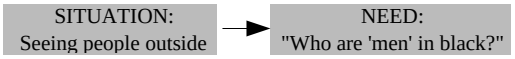

FIGURE 23. Example of spontaneous parallel stages (source: Gaia)

The connection between two information needs remained *unknown*, because the origin of one of them was not brought forward. That is to say, it was not clear if one need (no. 2) was triggered by the same situation as the other one (no. 1) or not:

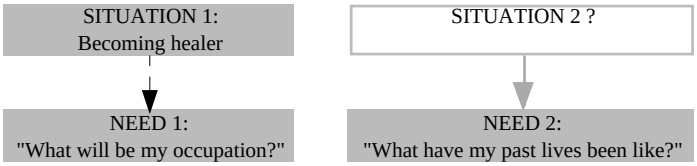

FIGURE 24. Example of stages with unknown parallel relationship (source: Helena)

In the piece of research at hand, only certain pairs of stages seemed to crop up at once. One may speculate, however, that almost any type of phase may coincide with any other. According to Table 55, the commonest parallel relationship was obviously the same source which accounted for a good third of all relations. The rarest kind were spontaneous relationships whose share was less than one tenth. One coinciding relation was obscure. If parallel relationships are selected as a research problem in a future investigation, the precise timing of stages becomes a critical concern which must be attended to in method better than here.

TABLE 55. Relationships between parallel stages, and their characteristics (n=24)

Parallel relationship	*Characteristics*	*f*	*%*
Same source	•stages originate with same information source	9	38
Different sources	•stages originate with separate information sources consulted simultaneously	5	21
Pseudo	•stages only appear simultaneous: in reality, their temporal relationship is vague	4	17
Same whole	•stages are parts of same totality	3	13
Spontaneous	•stage arises ex tempore during another stage	2	8
[Unknown]	[relationship unclear]	1	4
Total		24	100

Dependencies

Some statistically significant correlations were discovered between essence and process variables: number of sources and topic of information, motive for action and recurrence of outcome, method of information reception and recurrence of outcome, as well as preceding and following stage.

Number of sources vs. topic of information

There was a curious relationship between the number of source entities and the *paranormality* of topic of the information obtained (see Table 56): when one source was consulted, the topic was usually normal, but if the actor used two or more similar originators, the subject was more often paranormal. The cause for this regularity is yet to be found.

TABLE 56. Effect of number of source entities on paranormality of topic of information* (n=69)

	Number of sources					
	One		More than one		Total	
Paranormality of topic	f	%	f	%	f	%
Normal	32	64	6	32	38	55
Paranormal	18	36	13	68	31	45
Total	50	100	19	100	69	100

* $\phi = 0.29$, $p<.05$.

Motive for action vs. recurrence of outcome

The recurrence of the information outcome seemed to be at least partially dependent on the *basic* motive for action in the situation (see Table 57): when the spur was internal, over half of the consequences took place once, but when the motivation was external, almost all outcomes were one-time incidents. The reason for this state of affairs is not apparent, but it may be speculated that the situations which have been externally imposed on the actors are more likely ones that they wish to get over and done with, whereas internally generated conditions may be longer-term endeavours involving more evolutionary repetition.

TABLE 57. Effect of basic motive for action on recurrence of outcome* (n=51)

	Basic motive					
	Internal		External		Total	
Recurrence of outcome	f	%	f	%	f	%
One time	15	54	20	87	35	69
More than one time	13	46	3	13	16	31
Total	28	100	23	100	51	100

* $\phi = 0.36$, $p<.05$.

Method of reception vs. recurrence of outcome

The *generic* method of information reception also appeared to have an impact on the recurrence of information outcome (see Table 58). When communications were obtained normally, more than half of the outcomes repeated. On the other hand, when information was acquired by paranormal means, three quarters of the consequences happened just once. With the seminormal methods, the divide was even sharper: only one out of ten outcomes recurred. This regularity might be due to the uniqueness of the information: perhaps normal methods of information reception yield more general and public knowledge, whereas paranormal and seminormal means may be perceived as conveying messages that are more private and specific to the individual. Thus, the generality of the information could affect the number of outcomes.

TABLE 58. Effect of generic method of information reception on recurrence of outcome* (n=60)

	Method of reception							
	Normal		Paranormal		Seminormal		Total	
Recurrence of outcome	f	%	f	%	f	%	f	%
One time	14	47	15	75	9	90	38	63
More than one time	16	53	5	25	1	10	22	37
Total	30	100	20	100	10	100	60	100

* Cramér's V = 0.36, p<.05.

Preceding vs. following stage

When looking at which stage followed which in the processes of information action, Table 59 provides the answers. A *situation* was usually followed by an information need, but never by information. A *need* generally preceded an information source, but not information in any of the cases. A *source*, however, was succeeded only by information. *Information*, in its turn, conventionally came before an outcome, and just once before another piece of information. This happened when the interviewee got a communication from one source, and then immediately obtained another piece of information from another source which was present on the same occasion. Thus, there could not be information without a source. The findings substantiate the notion that the received information or obtained answers may generate new or revise old information needs and questions (see Byström 1999, 31; Johnson 1996, 8). However, it seems that these novel or changed needs are often mediated by an outcome and/or a (re)defined situation.

TABLE 59. Preceding vs. following stages* (n=265)

	Preceding stage					
	Situation	Need	Source	Information	Outcome	Total
Following stage	f	f	f	f	f	f
Situation	4	2	0	12	9	27
Need	28	1	0	10	8	47
Source	14	35	0	5	9	63
Information	0	0	72	1	1	74
Outcome	4	4	0	45	1	54
Total	50	42	72	73	28	265

* Cramér's V = 0.65, p<.001.

When an *outcome* was not the final phase of the process, it was almost always followed by either a situation, source or need — these manifested themselves in virtually equal numbers (see Table 59). This result corresponds very well with some earlier remarks. Savolainen (1999b, 85, 105) states that information use may modify the situation, or engender additional information needs and seeking. Moreover, the first empirical Sense-Making study, which was published in 1976, found out that people went on asking questions even after the situation had been resolved (Dervin 1983b, 19). Information

and another consequence each came after an outcome only once. Information was obtained in this way when a source first bestowed some information upon the interviewee, he did something with it, and then the source again gave him some additional information on the same affair. On the other hand, one outcome followed the other when the person first used the information to do something, and then wielded it again later in order to do another thing. In brief, the sequential paths that the process could take were multifarious. These results were again undermined, though, by the potential blanks in the processes.

7.3 Need processes

The data held 80 analysable information need processes. This made an average (median) of about three stages per need process, since the situations were excluded.

Single need processes

The meaningful features that were uncovered here include sequence, scope, number of stages, and special events.

Sequences

The basic types of need processes were conceptualized as sequences of stages of which there were three: Sequence 1, Sequence 3, and Sequence 4. The integer refers to the number of different phases in the concatenation. *Sequence 1* included nothing but a singular information need: a question arose but an answer was not sought, for one reason or another. *Sequence 3*, in its turn, comprised of one (or more) source(s), piece(s) of information, and outcome(s). This type of process was characterized by the fact that information was searched for and/or acquired without at least a conscious need for it. Figures 25 and 26 exemplify Sequences 1 and 3:

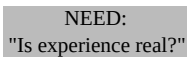

FIGURE 25. A Sequence 1 need process (source: Gaia)

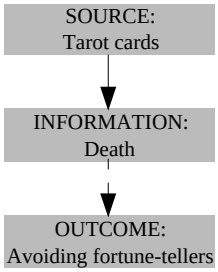

FIGURE 26. A Sequence 3 need process (source: Jenni)

Sequence 4 represented a ”complete” need process, advancing from a need to one or more information outcomes. The need processes whose sequence was *unknown* were thus named because it was uncertain whether all the different stages of the process had been tapped or not. Figures 27 and 28 portray samples of Sequence 4 and an unknown sequence:

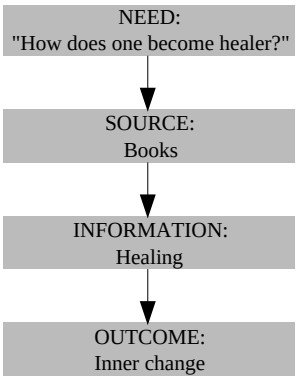

FIGURE 27. A Sequence 4 need process (source: Helena)

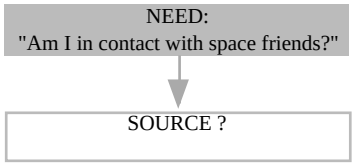

FIGURE 28. A need process with unknown sequence (source: Ulla)

It is worth mentioning here that although all these processes are called ”need processes”, they were in fact not required to contain a need at all. In such cases, the processes could be regarded as instances of purposeless or unconscious information seeking, or of information delivery (by someone else). The prevalence of need processes with an unknown sequence was disturbing, for these comprised nearly half of all concatenations. Because of this, the proportions of the identified types presented herein are cast into doubt. It would seem that Sequence 4 processes were by far the dominating sort, whereas Sequence 1 was the least frequent kind, although Sequence 3 was not much commoner.

Scopes

The scope of need processes was either micro- or mesoprocess. A *microprocess* was composed of one stage only which was an information need (see Figure 29). A *mesoprocess* could consist of many phases, as in the example on solving the mystery of ”men” in black (in Figure 30). The compass of some need processes could not be determined, either because the whole need process was probably not captured, or because the recurrence of the process was uncertain. The latter reason was behind the sample in Figure 31 having been categorized as *unknown*.

FIGURE 29. A micro need process (source: Gaia)

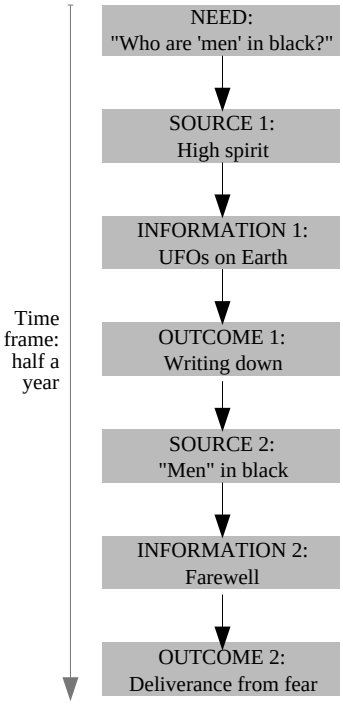

FIGURE 30. A meso need process (source: Gaia)

FIGURE 31. A need process of unknown scope (source: Laura)

As Table 60 announces, mesoprocesses appeared to dominate the need processes, as there was only one microprocess. Some inaccuracy may be involved in these figures, however, since the share of unknown scopes was almost one fifth.

TABLE 60. Scopes of need processes (n=80)

Scope of process	*f*	*%*
Mesoprocess	65	81
Microprocess	1	1
[Unknown]	14	18
Total	80	100

Number of stages

The need processes exhibited great variation in the number of *stages in general* that they consisted of. The shortest process was constituted by one phase (need), while the longest one was made up of nine stages. On the average (median), the need processes included three phases, although four-stage processes were by a very thin margin the largest group. Of the *individual stage types*, the number of needs was either none or one. The latter circumstance was dominating, for almost two thirds of the need processes included a need. The number of sources, pieces of information, and outcomes fluctuated between none and three, the mean (median) being one of each sort.

This result deviates from Tuominen's (1992a, 50) who discovered that for each information need, people looked for information from at least two or three sources on the average. On the whole, it appears that information seeking is directed to the first few central sources of information (Rich 1983, according to Savolainen 1993a, 52-53; Savolainen 1993a, 100). In comparison, three sources was the maximum detected in my

study. The discrepancy may be either a demonstration of the special nature of information action in the context of the paranormal, an upshot of focusing on the core sources in the interviews, or a repercussion of the participants' lumping sources together in the piece of research at hand. Then again, the peculiarity might simply arise from the relative scarcity of disposable sources dealing with the supernatural.

Special events

Many special events in the need processes were observed at the level of individual stages. Some of them involved one process, others two or even more processes. The need processes were considered as incorporating a special happening if their content and/or chronological order of the phases deviated from the standard sequences laid out previously (see Figures 25-27). Five categories were discovered: branching, combining, interruption, scattering and switching (see Table 61 below). *Branching* generally (in three out of four cases) happened when more than one separate piece of information was gained from a source, or occasionally when two sources were consulted at the same time for the same purpose. The former circumstance is illustrated below:

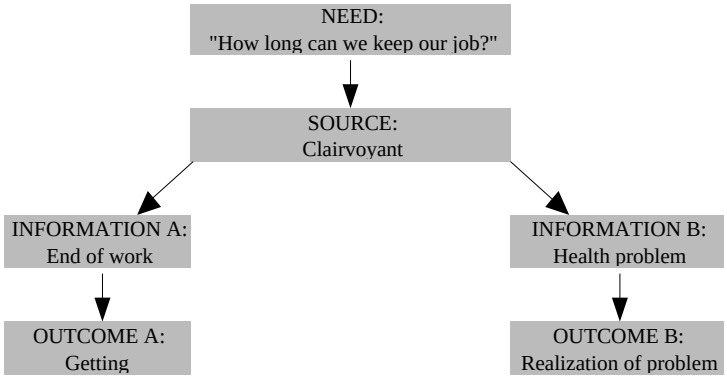

FIGURE 32. A branching need process (source: Cecilia)

Hence, branching means that the process forks into two (or more) parallel subprocesses. *Combining* was the opposite of branching. It conventionally (in two thirds of the instances) took place when two need processes or their subprocesses ended in a joint outcome (see Figure 33), or sometimes when a source was turned to for satisfying two discrete needs. Combining thereby refers to the phenomenon of two (or more) need processes blending into one by means of a mutual stage. *Interruption* of the need process often (more than every second time) occurred after information had been obtained, so that an intervening process or phase ensued, ultimately followed by a postponed information outcome of the first process. Figure 34 depicts a case in which the communication was of no consequence until after the partaker had defined a situation. The delayed stage could also be an information source (after a need), but rarely information (after a source).

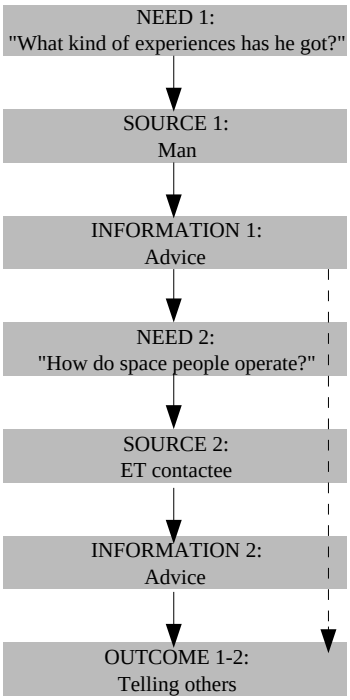

FIGURE 33. Example of combining need processes (source: Paavo)

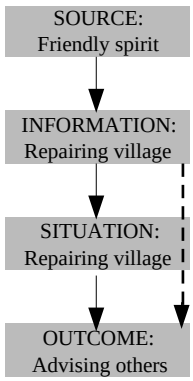

FIGURE 34. An interrupted need process (source: Nelli)

Scattering was related to interruption, but it incorporated two important differences: there was not always an intervening process, and the dispersing stage manifested itself more than once. The most frequent phase (with a share of two thirds) of this kind was an information outcome (see Figure 35), but information scattered in this way, too. In practice, this imports that either the same information had different outcomes at different times (see Perttula 1994, 41), or the same source divulged different pieces of information at different moments. A *switching* need process, in its turn, was an otherwise normal process, except that it included information and/or an outcome that actually advanced the process in a (parallel) situation chain other than the one in which the need process started. In Figure 36, the informant went to see a healer, hoping to get help with her health problems, but the main informational contribution of the meeting focused on a past life of hers.

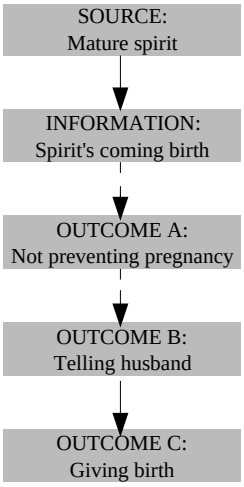

FIGURE 35. A scattering need process (source: Dagmar)

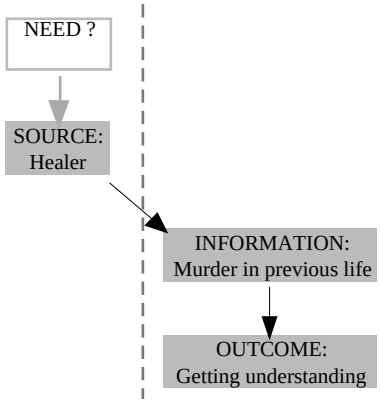

FIGURE 36. A switching need process (source: Jenni)

Although these special events did not happen with some phases in this research, one may hypothesize that almost any type of stage can effect such an ”abnormality”. Again, the reason for these incidents would be a fascinating object of study. From Table 61, we can easily see that interruption was the most common out-of-the-ordinary event, as it accounted for over half of all instances. Switching and scattering were obviously the least frequent occurrences. When the total number of special events (42) is proportioned to that of the need processes (80), it turns out that on the average, about every second need process contained an unusual incident of some sort.

TABLE 61. Special events in need processes, and their definitions (n=42)

Special event	*Definition*	*f*	*%*
Interruption	continuation of process is postponed by another, intervening process	23	55
Branching	process is divided into two parallel sub-processes	8	19
Combining	two processes merge into one via common stage	6	14
Scattering	same stage recurs in different form at later time	3	7
Switching	process changes over to another, parallel situation chain	2	5
Total		42	100

Need processes together

There were all kinds of relationships to be found between the need processes: they took place one after another, parallel to each other, overlapping each other, and one enveloping another. Most of these relations manifested themselves in such chaotic ways as to make their stage-wise analysis unfeasible, at least within this piece of research.

Nevertheless, *embedded* processes exhibited a coherent enough pattern that was possible to scrutinize more closely. An embedded need process was a kind of subprocess of a larger need process which enveloped it. There appeared to be two types of embedded processes: metaprocesses and specifying processes. A *metaprocess* was a subprocess that aimed at clarifying the overarching process itself. There is a sample of this in Figure 37 in which the interviewee wondered why she received an announcement about God. A *specifying process*, on the other hand, delved into the subject matter of the enveloping process in more detail. Figure 38 holds an illustration of this sort of process, as the interviewee first wanted to know about the origin of an unidentified aerial phenomenon that he had seen, and then specifically desired to know if it had been seen on radar. After this, he returned to asking others about the nature of the object. The most central implication of these categories is that information action does not always deal with the essence of things — it may also tackle the steps or progression as such. Altogether nine embedded need processes were found, so they were not overly common. Five of them were metaprocesses, and four were specifying processes. This nestedness might still be worthy of additional research.

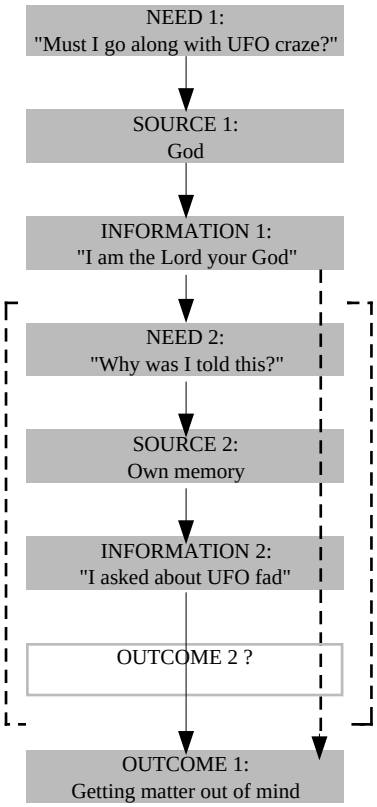

FIGURE 37. A meta need process (source: Laura)

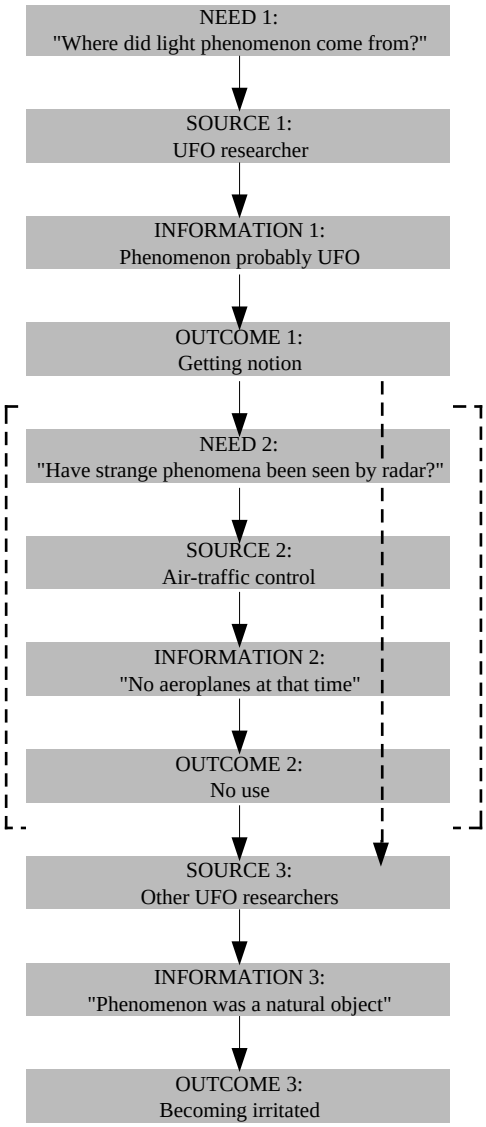

FIGURE 38. A specifying need process (source: Kalle)

Need processes in situation processes

When the need processes were scrutinized in their larger context — situation processes — it could be discerned that the need processes were not always confined to one situation process only. It turned out that in fact a need process could be a part of two or even three parallel or consecutive situation processes. All three contingencies are exampled in Figures 39 to 41.

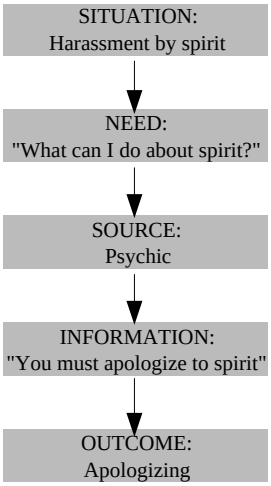

FIGURE 39. A need process belonging to one situation process (source: Nelli)

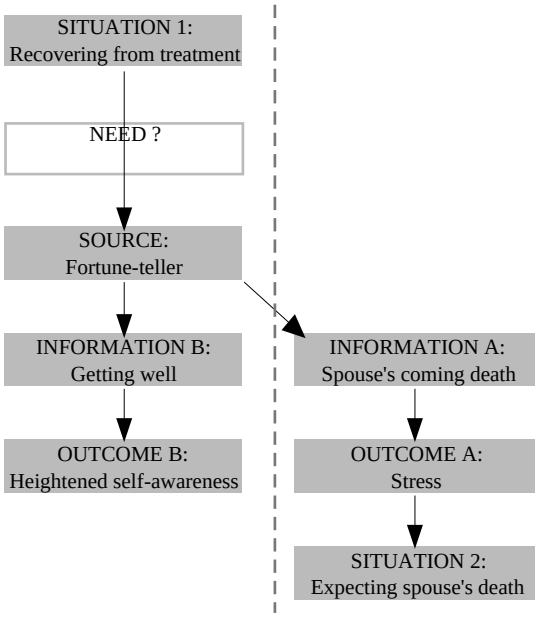

FIGURE 40. A need process belonging to two situation processes (source: Jenni)

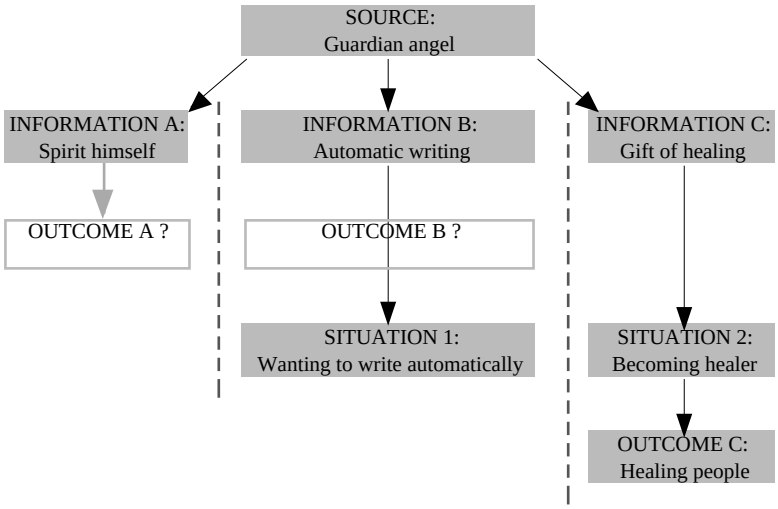

FIGURE 41. A need process belonging to three situation processes (source: Nelli)

Seldom was it impossible to say whether a need process was a member of one or two situation processes, as in Figure 42. This happened because it remained *unknown* if the other parallel process (started by Need 2) took place within a situation process of its own or not.

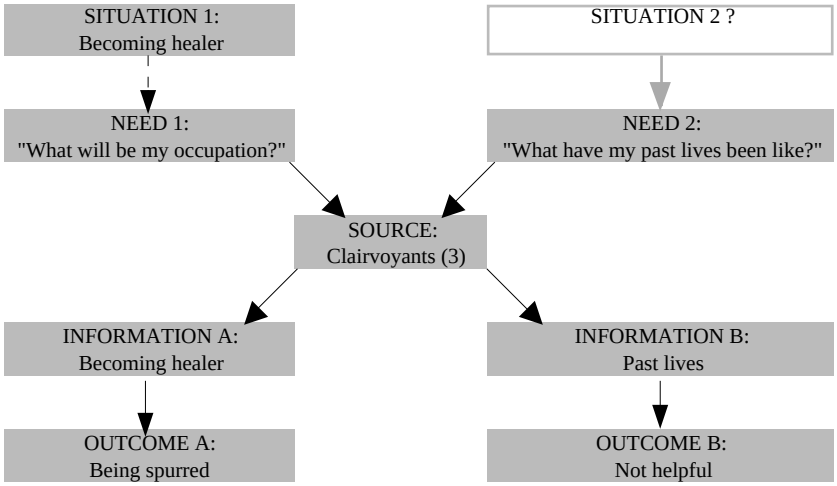

FIGURE 42. A need process belonging to unknown number (one or two) of situation processes (source: Helena)

Table 62 communicates that the great majority of need processes were a member of just one situation process. Every ninth need process belonged to two situation processes, and merely one was a part of three situation processes. The dispersion of two need processes (see Figure 42) was left unidentified in this regard.

TABLE 62. Number of situation processes to which need processes belonged (n=80)

Number of situation processes	*f**	*%*
One	68	85
Two	9	11
Three	1	1
[Unknown]	2	3
Total	80	100

* Md_n = ”one”.

7.4 Situation processes

Altogether 49 situation processes were examined. On the average (median), they comprised about four stages or one need process each.

Single situation processes

The attributes that came to characterize these processes are structure, scope, number of need processes, and end stages.

Structures

The primary identifier of situation processes proved to be their chronological structure. A complete set of five compositions was discovered: ”situation…”, ”situation”, ”…”, ”…situation” and ”…situation…” (see Table 63). The three dots (…) mark one or more need processes occurring before, after or without construing a situation. *”Situation…”*

imports that a need process stemmed from the situation (see Figure 43). This has generally been viewed as the standard arrangement of situation processes. A situation did not always give rise to a need process (see Figure 44), in which case the structure of the process was simply *”situation”*. On the other hand, a solo need process *”…”* (as in Figure 45) could take place without a connection to any particular situation.

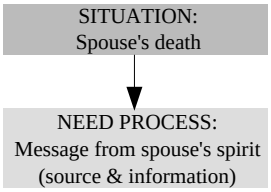

FIGURE 43. A situation process of type ”situation…” (source: Jenni)

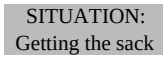

FIGURE 44. A situation process of type ”situation” (source: Cecilia)

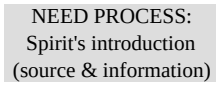

FIGURE 45. A situation process of type ”…” (source: Nelli)

In the instance of *”…situation”*, a need process lead to the situation, like in Figure 46:

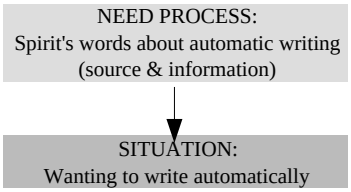

FIGURE 46. A situation process of type ”…situation” (source: Nelli)

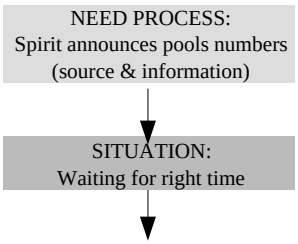

FIGURE 47. A situation process of unknown type (source: Kalle)

The most extensive structure was constituted by *”…situation…”* which means that a need process generated the situation which in turn bred more information seeking:

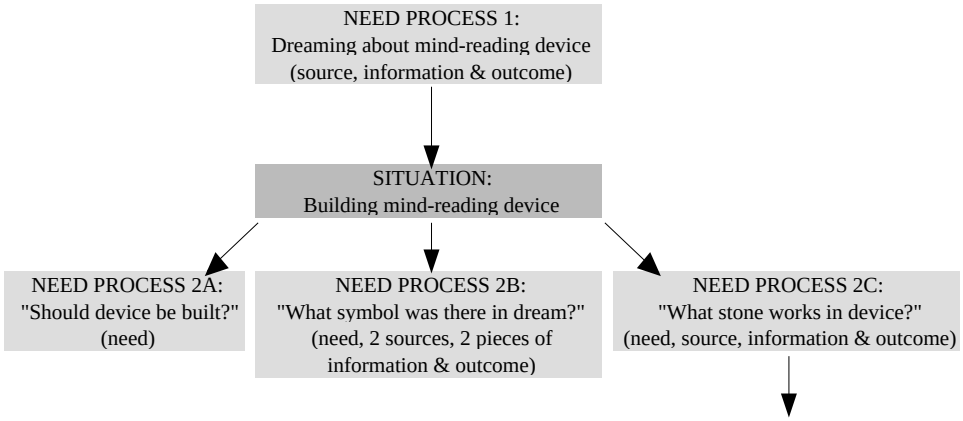

FIGURE 48. A situation process of type ”…situation…” (source: Risto)

A situation process (in Figure 47) could still be inconveniently under way at the time of interviewing. Its final course was therefore left *unknown.* According to Table 63, ”situation…” seemed to be the dominant composition, as it manifested in two thirds of the cases. Some (about one fifth) processes had the structure ”…situation…”, but the other three arrangements were quite marginal: ”situation” and ”…situation” took place just once each. The structure of one process could not be found out.

TABLE 63. Structures of situation processes, and their definitions (n=49)

Process structure	*Definition*	*f*	*%*
situation…	situation followed by need process(es)	33	67
…situation…	situation preceded and followed by need process(es)	11	22
…	need process without situation	2	4
situation	situation without need process	1	2
…situation	situation preceded by need process(es)	1	2
[Unknown]	[structure uncertain]	1	2
Total		49	100

Scopes

The variety in the scopes of the situation processes was much greater than with the need processes: there were not only mesoprocesses, but also macro-, mega- and superprocesses. A special word about *mesoprocesses* is in order here. Not many situation processes were mesoprocesses, as they were prone to form larger wholes. The condition under which the ambit of a situation process could be ”meso” was one (or two) of the following: the process happened within a short time interval, or involved no identifiable situation. The example in Figure 49 met both requirements. Then again, a *macroprocess* was driven by a mission, albeit the extract in Figure 50 concentrates more on the formation of one (solving the riddle of a mysterious voice).

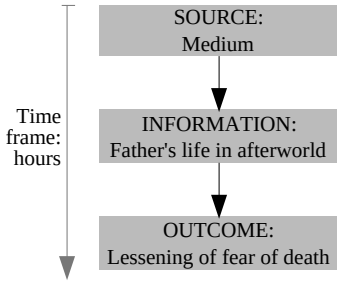

FIGURE 49. A meso situation process (source: Taavi)

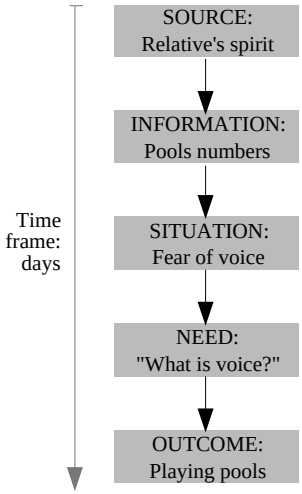

FIGURE 50. A macro situation process (source: Kalle)

Figure 51 portrays a *megaprocess*, for it seemed that the actor’s project of self-education would go on for the rest of his life. In a *superprocess* (see Figure 52), the interviewee saw her endeavour — the implementation of her theories in developing revolutionary technology — as a grand and long process that would be taken part in by a host of experts.

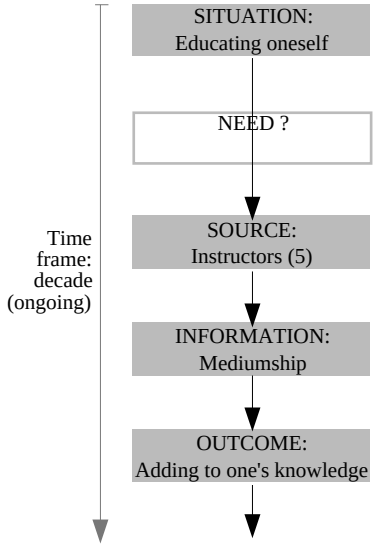

FIGURE 51. A mega situation process (source: Sampo)

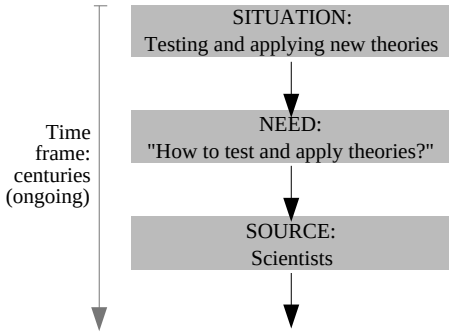

FIGURE 52. A super situation process (source: Ulla)

The only scope of the five not represented was *microprocess*. The explanation for this is obvious: only individual stages and sometimes need processes fit into such a microscopic timeframe. As Table 64 below reveals, macroprocess was definitely the dominating extent, since it accounted for two thirds of all scopes. It was followed by mega- and mesoprocesses with more meagre shares, and finally by superprocesses of which there was only one. When contrasting the scopes of situation processes (Table 64) and need processes (Table 60), a huge difference between the portions of mesoprocesses can be detected. This is due to the simple fact that the two units of processes operated at different levels of action.

TABLE 64. Scopes of situation processes (n=49)

Scope of process	*f*	*%*
Macroprocess	34	69
Megaprocess	10	20
Mesoprocess	4	8
Superprocess	1	2
Total	49	100

Number of need processes

The situation processes incorporated from none to five need processes. The average (median) was one need process per situation process, and this was also the most typical composition of situation processes.

End stages

The first and last stage of situation processes were determined, as well. The *first* phase could be any one of the five types, except for an information outcome. It may appear weird that a process could start with information, but this has a natural explanation: such a circumstance came about when a source was conferred with in one situation

process, and a component of the communication that the interviewee got commenced another, partially parallel situation process. The *last* stage of a process of this decription could be absolutely any one of the five. A situation, need and source as the final phase merit an elucidation. A situation could be the last stage when it did not appear to lead into anything, or when it was the only phase in the process. The process could stop at a need if no action was taken to satisfy it. An information source could be seen as the final stage in a process in which the interviewee met with a source for one thing, but received information for another thing instead, so that the need process switched over to another, parallel situation chain.

TABLE 65. First and last stages of situation processes (n=49)

	End stage			
	First stage		Last stage	
Stage type	f	%	f	%
Situation	34	69	2	4
Information need	1	2	2	4
Information source	10	20	1	2
Information	4	8	6	12
Information outcome	0	0	23	47
[Unknown]	0	0	15	31
Total	49	100	49	100

Table 65 reports that a situation was the most common beginning stage of situation processes with its share of over two thirds. Sometimes (once in every five cases), processes started with a source, but uncommonly with information and especially with a need. An information outcome was the most frequent final phase, as it accounted for almost half of all occurrences. The processes finishing with a source, need or situation were very scarce indeed, as they together amounted to a diminutive share of one tenth. Regrettably, this result is hampered by the high proportion (nearly one third) of processes with an unknown ending. The reason behind this was the many processes which had not yet reached their conclusion at the time of the interviews.

Situation processes together

The temporal arrangement of situation processes appeared to be much more straightforward than with the need processes, because here joint entanglements were all but missing. That is, when the whole process was constituted by more than one situation process, these almost invariably progressed either one after or beside another. An exception to this rule was an embedded process occurring within a larger situation process.

Positions

Four *relative* temporal positions of situation processes were detected: lone, preceding, following and parallel. A *lone* situation process was, as its name implies, a process that alone constituted the whole process of information action, without having direct ties with other situation processes. Figure 53 presents an example of just such a process. A

preceding situation process was one that was *followed* and/or *paralleled* by another situation process. Figure 54 illustrates these three positions at once.

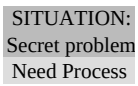

FIGURE 53. A lone situation process (source: Sampo)

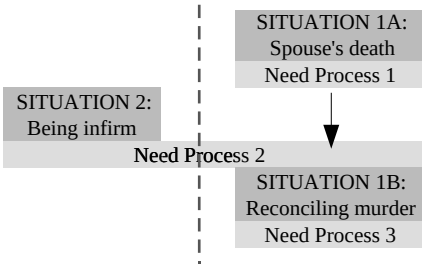

FIGURE 54. A preceding, following and parallel situation process (source: Jenni)

When the various positions are examined quantitatively, it seems that there were 17 lone, 23 preceding, 16 following, and 11 parallel situation processes. The locality of one process was left pending, for it could not be determined whether that process was the only one in the whole process or not. These figures are severely biased, however, since a process could be a preceding, following and parallel one simultaneously. This is why the total (68) far exceeded 49, the number of situation processes.

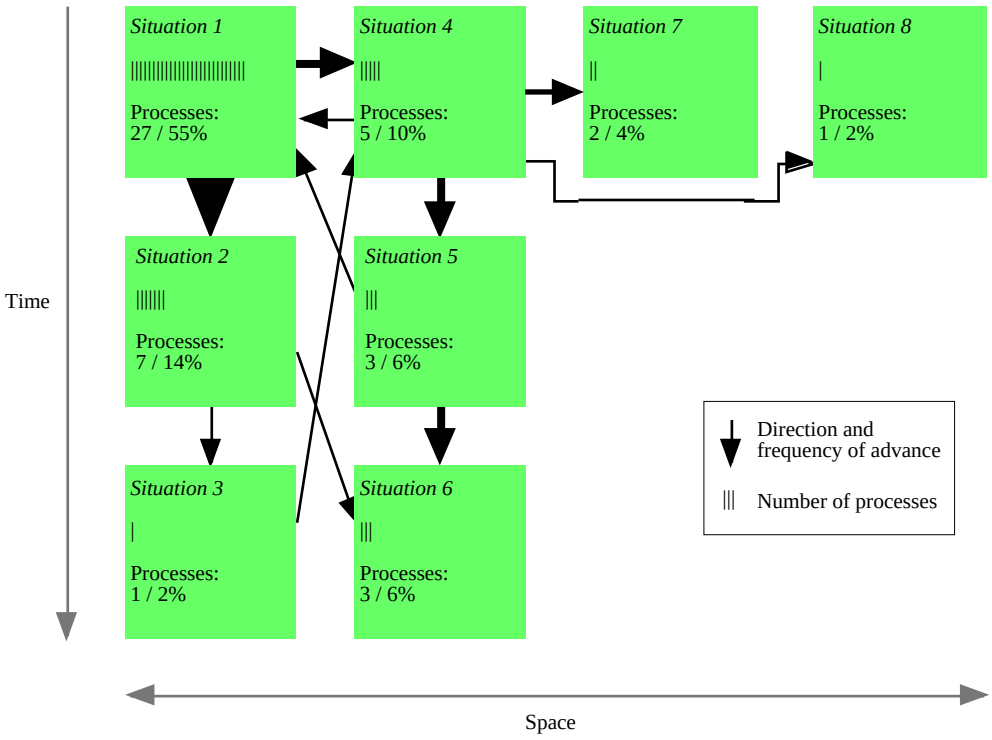

FIGURE 55. Absolute positions and paths of situation processes (n=49)

While the relative positions provide a basic understanding of process dynamics at this level, picturing the *absolute* temporal positions of situation processes gives a better idea of the whole process of information action. Figure 55 is a sort of overview of all the situation processes that appeared in the data. It depicts the absolute ”locations” of these processes and how one process led to another in time-space. All in all, eight different positions were manifest, as indicated by the eight serial numbers. The location of the first (and sometimes only) situation process of each whole process was Situation 1. From it, one or two situation processes unfolded in a consecutive (Situation 2) and/or

parallel (Situation 4) manner, and these new processes could in turn spark off further ramifications. The maximum number of successive situation processes was three, whereas the maximum number of parallel situation processes (and also situation chains) was four. It would seem that four processes (in Situations 3 and 5) advanced backwards in time (to Situations 4 and 1, respectively), but this was not really the case. The notation in these instances merely signifies that the process went forward to the first situation process of a parallel situation chain that started either while the previous process was still running (Situation 3 → Situation 4), or before the latter process had begun, implying a return to an older, parallel process (Situation 5 → Situation 1). A similar recurrence took place when a process in Situation 1 proceeded to Situation 4, and then went back again to Situation 1.

Figure 55 also relates the distribution of processes among the eight positions as well as the magnitude of the flow of processes. The most crowded location was naturally Situation 1 in which more than half of the situation processes resided. The rest of the processes dispersed rather sparsely among the seven other loci of which Situations 3 and 8 represented the rarest ones with a single hit each.

When the process flow (in Figure 55) is looked at as a whole, the following pattern can be made out. If there was more than one situation process in the whole process, the first situation process (Situation 1) was prone to lead to a second, subsequent process (Situation 2) which, in its turn, was occasionally taken to another following process (Situation 3) or the third process of a parallel situation chain (Situation 6). On the other hand, if the whole process also involved a parallel situation chain (begun by Situation 4), which was a less likely alternative, it more often took a linear path of consecutive situation processes (Situations 5 and 6) than branched off to parallel processes (Situations 7 and 8). It must be pointed out, however, that these courses of process were not mutually exclusive: some situation processes had both successive and parallel offshoots. To sum up, the situation processes — just like the stages — more often took place consecutively rather than in parallel.

Embedded process

Of the 49 situation processes, there was only one which could be deemed embedded within another situation process. This specimen is presented in Figure 56 below. The enveloping process involved seeing mysterious persons in black and trying to cope with the ensuing fear. After the interviewee’s trepidation had dissipated, she had another creepy experience dealing with strange lights, but she was able to sort it out rather soon. This nested situation process was then followed by two need processes in which she acquired additional information related to the men in black who were earlier discovered by her to be of extraterrestrial origin. All in all, the embedded process would not have been embedded at all, if the previous process had not continued after the following process. That is to say, the first process did reach a kind of completion before the appearance of the second situation, but evidently without the interviewee’s deliberate intention, it went on to elaborate on the earlier themes. Thus, the nested process was both preceded and succeeded by a more extensive situation process. This phenomenon was identical to the one with need processes, although it was considerably rarer here.

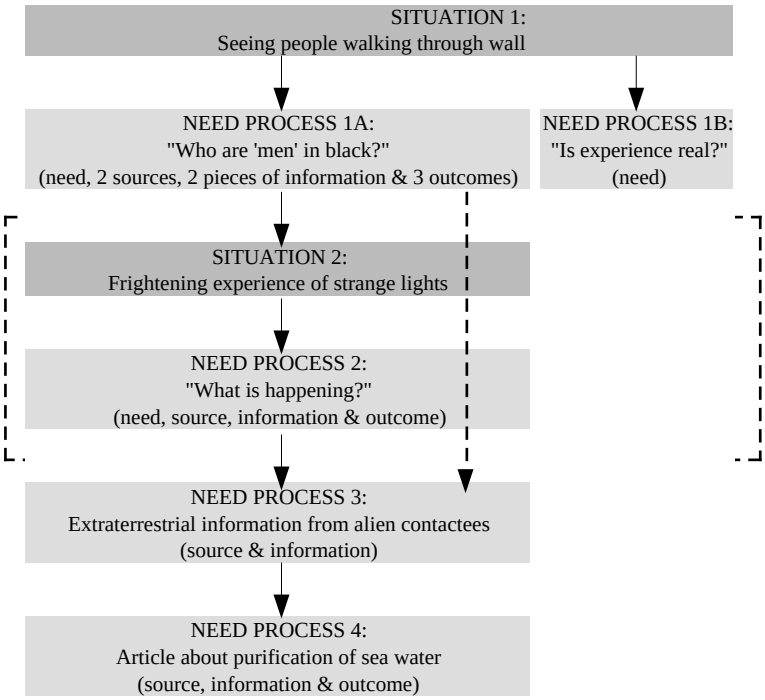

FIGURE 56. An embedded situation process (source: Gaia)

7.5 Situation chains

The analysed data incorporated 35 situation chains in all. On the average (median), each chain was made up of seven stages, two need processes, or one situation process.

Single chains

The situation chains are described via partially familiar qualities: complexity, scope, and position of situation processes.

Complexities

The situation chains were fundamentally characterized by their complicatedness. The complexity level varied between one and three, according to the number (from one to three) of successive situation processes held. To be exact, a situation chain with one situation process only was not really a chain proper at all, since this is by definition composed of more than one link (situation process). Regardless, in order to preserve a holistic view, I deemed it beneficial to include this category, as well. All three Complexities are illustrated in Figures 57-59 below:

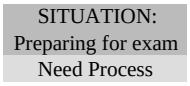

FIGURE 57. A situation chain of Complexity 1 (source: Dagmar)

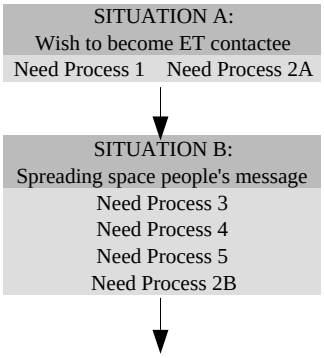

FIGURE 58. A situation chain of Complexity 2 (source: Paavo)

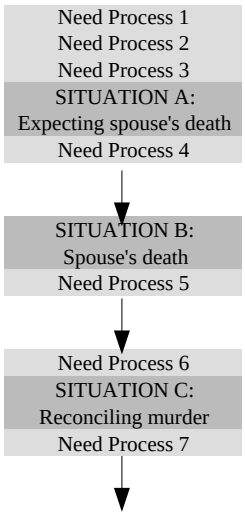

FIGURE 59. A situation chain of Complexity 3 (source: Jenni)

Table 66 indicates that one-situation-process chains were prevalent, as these represented over two thirds of all. The portions of chains with two or three situation processes were, as a matter of course, much smaller: the least frequent instances were the chains of Complexity 3 which accounted for a share of one ninth.

TABLE 66. Complexity of situation chains, and its definitions (n=35)

Chain complexity	*Definition: chain comprises of …*	*f*	*%*
Complexity 1	…one situation process	25	71
Complexity 2	…two situation processes	6	17
Complexity 3	…three situation processes	4	11
Total		35	100

Scopes

Like situation processes, the situation chains were of four scopes: meso-, macro-, mega- and superprocess. A *mesoprocess* is exemplified by Figure 60 in which the informant went for a stroll. Dealing with one's illnesses (see Figure 61) was an instance of a *macroprocess.*

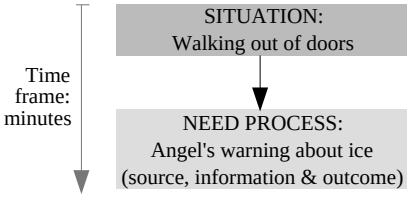

FIGURE 60. A meso situation chain (source: Dagmar)

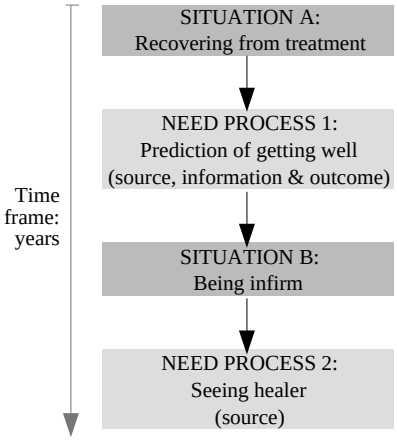

FIGURE 61. A macro situation chain (source: Jenni)

A *megaprocess* could be, for example, the evolution of the respondent's life in the area of the supernatural (see Figure 62). Lastly, the only *superprocess* here (in Figure 63) was the very same as with the situation processes (Figure 52).

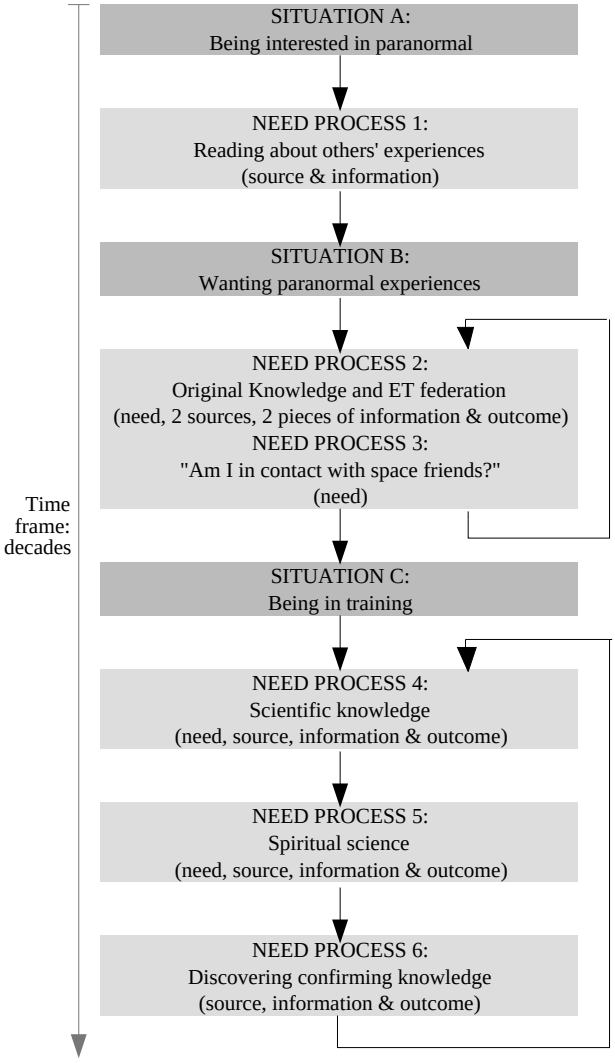

FIGURE 62. A mega situation chain (source: Ulla)

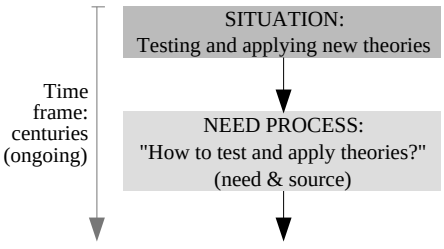

FIGURE 63. A super situation chain (source: Ulla)

According to Table 67, most (nearly two thirds) of the chains were macroprocesses. With their share of one fourth, megaprocesses were the second commonest type. Meso- and especially superprocesses were rather rare: just one of the latter kind was present. As this result (in Table 67) on the scopes is set side by side with that on the situation processes (in Table 64), it can be concluded that there were only small differences between the distributions.

TABLE 67. Scopes of situation chains (n=35)

Scope of chain	*f*	*%*
Macroprocess	22	63
Megaprocess	9	26
Mesoprocess	3	9
Superprocess	1	3
Total	35	100

Positions of situation processes

The situation chains were also scrutinized in terms of what sort of situation processes (conceptualized as structures) occupied which absolute temporal location. Grounded on Table 68, it seems that the chains usually (in about two thirds of the cases) began with ”situation…”, although the processes of type ”…situation…” had their place (in nearly one fourth of the instances), too. The second position was almost exclusively (in nine out of ten cases) reserved for the situation processes of description ”situation…”. A major contrast came with the third locality, however: the foremost situation process was ”…situation…”, and ”situation…” did not materialize at all. The cause for this could not be fathomed.

TABLE 68. Positions of situation processes in situation chains (n=49)

	Position in chain							
	First		Second		Third		Total	
Situation process	f	%	f	%	f	%	f	%
situation…	24	69	9	90	0	0	33	67
…situation…	8	23	0	0	3	75	11	22
…	2	6	0	0	0	0	2	4
situation	0	0	0	0	1	25	1	2
…situation	1	3	0	0	0	0	1	2
[Unknown]	0	0	1	10	0	0	1	2
Total	35	100	10	100	4	100	49	100

Chains together

The associations between situation chains were even more plain than with the situation processes. Their positions and juncture elements are introduced here.

Positions

The situation chains could be situated in one (or more) of three *relative* temporal positions: lone, preceding and parallel. A *lone* chain (such as the one in Figure 64 below) was one that had no accompanying parallel chains. When the whole process embraced more than one situation chain, a *preceding* chain lead to one or more *parallel* strings. This circumstance is exemplified by Figure 65. In actual fact, both the preceding and parallel chain were parallel processes (to each other), but the process that initiated first was called ”preceding”. It was nearly always the case that when there were parallel situation chains, one of them had started earlier than the other. This time lag could be even years. That is to say, the parallel processes did not usually occur at strictly the same time, but overlapped each other. At some stage, however, the chains intersected, and one of them in a manner of speaking ”fertilized” the other. Dervin (1983b, 60) refers to a similar relationship with her subconcept of Situation Embeddedness (which is an inapt term) that depicts the occurrence of one road crossing another. However, she only speaks about situations meeting, whereas this research suggests that situation *processes and chains* can converge in other phases, as well. The passing over could happen later in the opposite direction, too, so that the two processes actually interacted. The most prevalent reason for parallel processes converging was apparently the incident in which a source gave the person information that pertained to two processes at once.

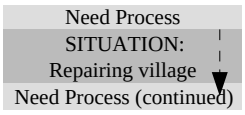

FIGURE 64. A lone situation chain (source: Nelli)

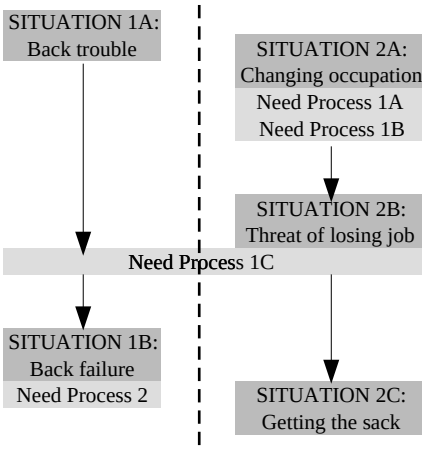

FIGURE 65. A preceding and parallel situation chain (source: Cecilia)

Altogether there were 21 lone, 11 preceding, and 11 parallel situation chains, so in the end, the lone chains appeared to be the prevalent kind of processes in regard to position. In the multi-situation-chain processes, many successions were at both a preceding and parallel location, which added to the frequency of these loci and thus, in a way, distorted the result.

The *absolute* temporal positions of situation chains are depicted in Figure 66 which illustrates the process of information action in much the same way as Figure 55 on the situation processes, only in a condensed form. At this level of analysis, only four locations were left for the chains to occur: Chain 1, 2, 3 or 4. The position of a chain depended on how many parallel concatenations had launched before it. Chain 1 was the first — and often only — situation chain. In about every fifth (5/27) case, however, it also lead to Chain 2 which almost invariably either spawned one or two more parallel processes (Chains 3 and 4), or returned to Chain 1. Chains 3 and 4 did not seem to

branch further.

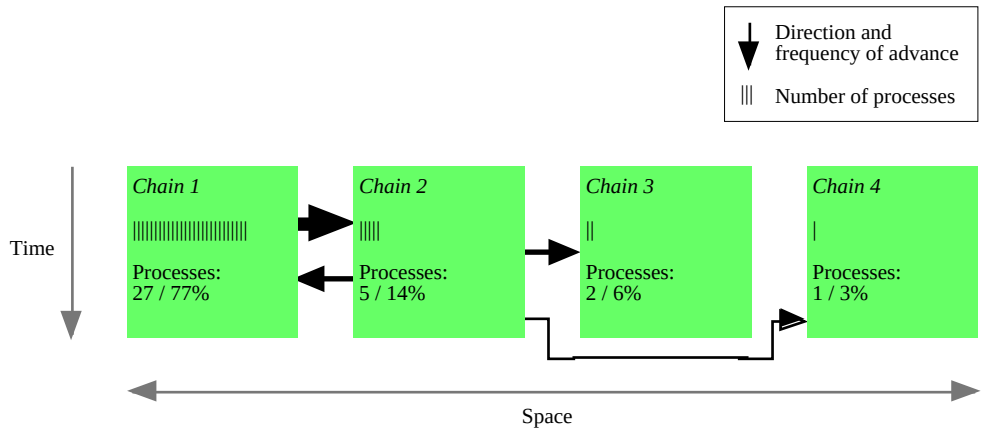

FIGURE 66. Absolute positions and paths of situation chains (n=35)

According to the abstracted process in Figure 66, Chain 1 was by far the commonest position, as it held a good three quarters of the chains. The frequencies of the parallel chains were drastically lower, so that finally just one sequence occurred in the fourth position.

Juncture elements

The points which linked two situation chains together are here called juncture elements. Three general components were distinguished: first, second and third situation process. The serial number refers to the chronological position of a situation process in the chain. Thus, for example, the first situation process of the preceding chain could go to the first situation process of a parallel chain. There was also one instance in which two parallel situation processes had no interface between each other at all. The situation chains did not join until later.

TABLE 69. Juncture elements in parallel situation chains (n=10)

	Position of process			
	Preceding		Parallel	
Juncture element	f	%	f	%
First situation process	7	70	9	90
Second situation process	2	20	0	0
Third situation process	1	10	1	10
Total	10	100	10	100

By looking at Table 69, it becomes evident that amid the preceding situation chains, it was conventionally (in over two thirds of the instances) the first situation process which brought about the parallel string. This happened quite rarely with the later situation processes, particularly with the last (third) one. The pattern was somewhat different with the parallel chains. That is, the first situation process was even more clearly the element through which the process flowed from the preceding process, as this took place nine tenths of the time. In no case was the second situation process directly affected by the preceding chain. The process advanced from the preceding chain to the

third situation process of the parallel succession just once. The dominance of the first situation processes as juncture elements is understandable, because the majority of situation chains included merely one situation process.

7.6 Whole processes

The number of whole processes that were researched was 27. The average (median) contents of one whole process were eight stages, two need processes, one situation process, or one situation chain. The aspects of processes which were investigated were just their complexity and scope. As the unit of analysis was a whole process in the current work, they could only be examined in themselves, without reference to other whole processes.

Complexities

The fundamental indicator used to characterize the whole processes was again complexity. There were four grades of intricacy — from one to four (see Table 70). Complexity was assigned on the basis of the number of parallel situation chains in the process. The underlying assumption was that the higher this aggregate was, the more complicated the whole process was, too. Figures 67 through 71 illuminate the whole processes at each degree of multiplexity. In the real world, there could be even more parallel chains.

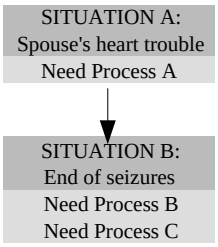

FIGURE 67. A whole process of Complexity 1 (source: Cecilia)

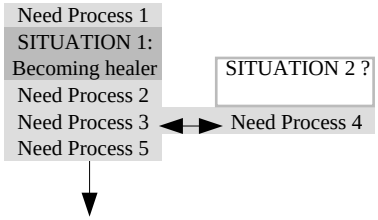

FIGURE 68. A whole process of unknown Complexity (1 or 2) (source: Helena)

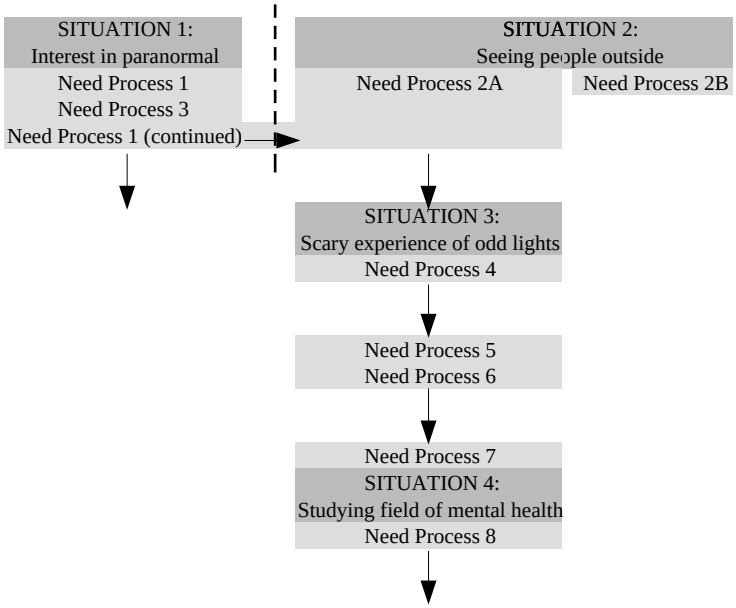

FIGURE 69. A whole process of Complexity 2 (source: Gaia)

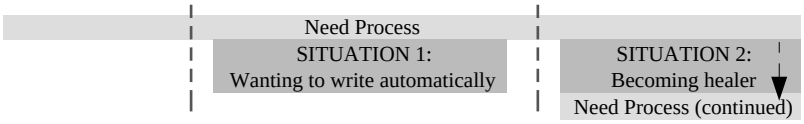

FIGURE 70. A whole process of Complexity 3 (source: Nelli)

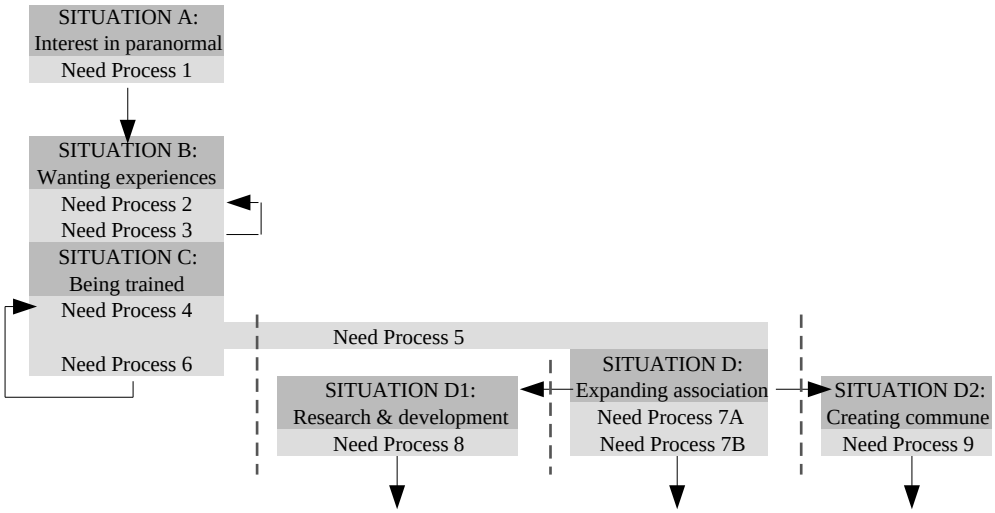

FIGURE 71. A whole process of Complexity 4 (source: Ulla)

According to Table 70, the Complexity 1 processes were obviously the most frequent type, since they represented almost four fifths of the processes. There were a few Complexity 2 whole processes, but the Complexity 3 and 4 processes were virtually unique. The complexity of one process remained undecided (see Figure 68), because it was uncertain whether it included one or two situation chains. All in all, most whole processes seemed to encompass one situation chain and one situation process only. In his study, Kumpulainen (1993, 39) discovered that almost all whole problem situations (processes) involved at least two different ways of stopping (situations). Once more, the variance can be accounted for in two ways: it may be that either the process of information action in the domain of the paranormal is simpler than information action in normal free time contexts, or the paucity/profusion of situations was a methodological artefact. Either way, the affair demands further research.

TABLE 70. Complexity of whole processes, and its definitions (n=27)

Process complexity	*Definition: process comprises of …*	*f*	*%*
Complexity 1	…one situation chain	21	78
Complexity 2	…two parallel situation chains	3	11
Complexity 3	…three parallel situation chains	1	4
Complexity 4	…four parallel situation chains	1	4
[Unknown]	[number of parallel situation chains unclear]	1	4
Total		27	100

Scopes

The whole processes represented three scopes only: meso-, macro- and megaprocess. The range of the whole processes was determined according to which scope was dominant among their constituent situation chains. Thus, the one whole process embracing the sole super situation chain was all in all a megaprocess, since most of its situation chains were on this scale. The most concrete action was undoubtedly embodied in a *mesoprocess.* This could involve, for example, receiving and digesting a message from one's deceased father through a medium (see Figure 72).

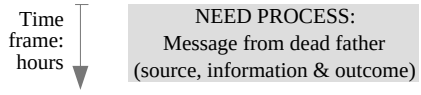

FIGURE 72. A meso whole process (source: Taavi)

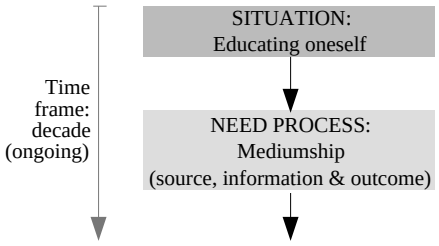

FIGURE 73. A mega whole process (source: Sampo)

As Figure 74 demonstrates, a *macroprocess* could be, for example, a process composed of a mega situation process (being interested in the paranormal) and smaller macro situation processes (being afraid of "men" in black, unravelling a case of weird lights, and taking up studies of mental health). A *megaprocess*, in its turn, operated on a considerably grander scale. For instance, it could deal with an ongoing endeavour to educate oneself on mediumship, as in Figure 73.

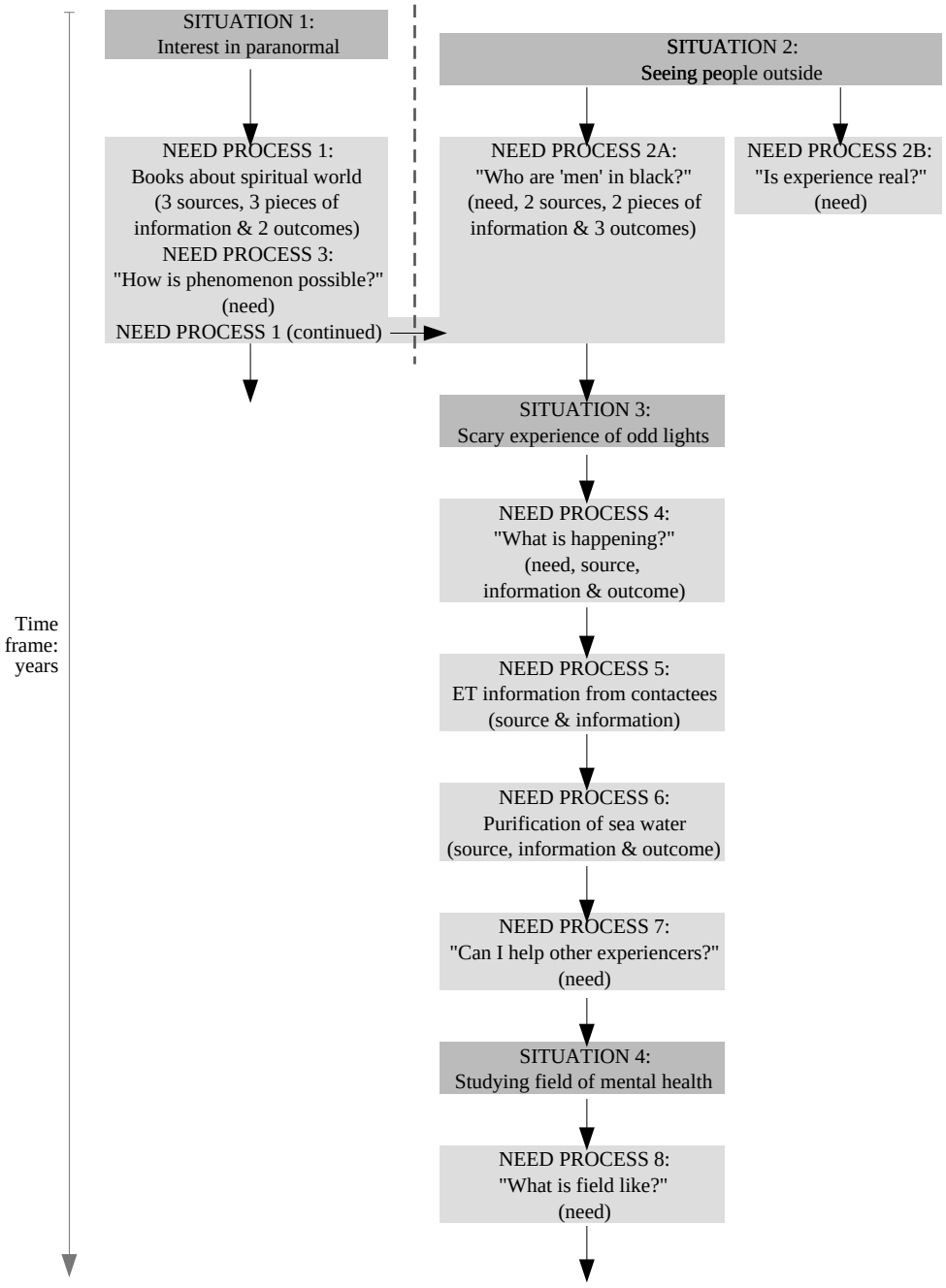

FIGURE 74. A macro whole process (source: Gaia)

As we look at Table 71, it appears that macroprocess was absolutely the most common scope of whole processes with its portion of nearly four fifths. Megaprocess was the minor runner-up, and mesoprocess was the least frequent ambit. When this distribution is contrasted with that of the situation chains (in Table 67), it is noted that among the whole processes, macroprocesses were more prevalent, and megaprocesses less prevalent than among the situation chains, whereas the shares of mesoprocesses were alike. The difference can be considered as a product of the principle of ”majority rules” brought up above: although one situation chain could be a megaprocess, one or more other progressions that seemed to be of higher priority could make the whole process a macroprocess.

TABLE 71. Scopes of whole processes (n=27)

Scope of process	*f*	*%*
Macroprocess	21	78
Megaprocess	4	15
Mesoprocess	2	7
Total	27	100

This concludes the presentation and examination of the empirical findings. The results will be summarized and discussed at a more abstract level in the next chapter (8).

8 Discussion

The primary purpose of this chapter is to review the findings on a more general plane. It must be borne in mind that the results and conclusions presented are subject to the restrictions imposed by validity, reliability and generalizability (see chapter 4 — in particular, sections 4.7 and 4.8). Nevertheless, it may be stated with fair confidence that in many cases, the implications of the findings extend to information action in virtually any leisure time context. One section ponders on the sphere of the supernatural in more abstract terms than the result chapters. The significance of investigating interest-related information action to the dominant conceptions of information seeking in our field of inquiry is ruminated over, as well. This chapter also proposes many theoretical developments founded on the interaction between the results, literature and critical thinking. Lastly, some methodological considerations are submitted. Moreover, promising paths for further research are signposted along the way.

8.1 Results in a nutshell

The cardinal discoveries were *qualitative* by nature. This study generated numerous novel categories and subconcepts, and even one main concept (information outcome). Except for the most specific classes, these are all exhibited as conceptual hierarchies in connection with the respective primary concept (in chapter 6). The piece of research also illuminated process dynamics in unprecedented depth. The *quantitative* findings illustrated the qualitative ones by setting these in proportion. They do not weigh as evidence, however, because of the small sample.

The large number of results may make it difficult to grasp the entire picture. Therefore, it could be beneficial to very briefly sum up the major findings, although this does no justice to the versatility of the research results. The recapitulation is done by presenting stage by stage and level by level the most typical instances of the essence and process of information action. Only the known values are taken into consideration here. These typifications as wholes are mere stereotypes which did not actually exist in the data. This is why they are partially inconsistent.

Typical information action

The actor was in a *situation* which could be characterized as orienteering. His movement through time-space was restricted but advancing. The motive that drove him was solving a problem, albeit the incentive was born internally. The position was perceived as not involving any paranormal elements.

The *information need* was about normal matters, specifically about other people. The question that the individual had in mind was whether something was true or false, although when looked at more generally, the enquiry was open-ended. The need focused on the present time.

The *information source* that was consulted was another being (person) — or, more broadly, an informal source — who was considered as normal. The source was sought out through an active search, and it was chosen by the seeker himself. The criterion for selecting this particular source was a characteristic of the source.

The *information* which was obtained dealt with a normal topic. It focused on the present moment, and it was received via normal means, specifically by listening.

The information had a couple of *outcomes.* It was used physically to communicate with others, or, to be exact, to inform them. The information was regarded as helpful, for it aided the person mentally to advance on his path by allowing him to reach an understanding of something. The information did not hurt the actor, so all in all, the information helped rather than hurt him.

The *barrier* which the individual encountered was caused by either his intellect or psyche. This being the case, the obstacle was personal or, in a way, self-inflicted by nature.

Typical process

The most common *stage* was the acquisition of information. No barriers were involved with any of the phases. A source probably comprised of one entity only. All stages took place just once. As to the relative positions, a preceding phase was most likely either a source or information. This was probably followed by another piece of information. There were no parallel stages.

The scope of the *need process* was mesoprocess. Only three stages made up the process. Interruption was the special event in it. The process did not envelop another need process, nor was it embedded in another one. The process was a part of just one situation process.

The structure of the *situation process* was a situation leading to a need process, and its scope was macroprocess. It incorporated four stages or one need process. The process began with a situation and finished up in an outcome. It did not precede or parallel another process, but was the first and only situation process in the whole process. Therefore, the process was not embedded in another one, either.

The *situation chain* encompassed one situation process, two need processes, or seven stages. Its scope was macroprocess. The process occurred alone in the whole process.

The *whole process* was formed by one situation chain, one situation process, two need processes, or eight stages. Its scope was still macroprocess.

8.2 The paranormal

Role

The study began as an examination of seeking information on paranormal phenomena. The long process of empirical work, however, drastically changed the research setting. It turned out that confining the paranormal to information alone was totally inadequate, for among the people interviewed, supernatural aspects — both abstractions and phenomena — could be perceived at virtually any stage of the process of information action. Therefore, it is befitting to discuss the observed role of the paranormal in situations, needs, sources, information, outcomes and barriers.

As the findings demonstrate, a *situation* can be seen as embracing supernatural phenomena. Since circumstances experienced as partially paranormal present to the actor a reality that contains something more than the consensus reality, I would suggest that paranormal situations function as triggers that set off information action that is different from that started by normal conditions.

An *information need* may exhibit a paranormal trait in its topic or Time Focus. Here, the role of the supernatural is apparently limited to guiding the process of information seeking beyond conventional themes.

An *information source*, on the other hand, may be reckoned as possessing supernatural talents, be perceived as a paranormal entity, or finding it may be attributed to ”higher forces”. This is probably the stage at which the supernatural has greatest importance. Some specialists in the paranormal are regarded as having access to sources or channels and information that are out of ordinary people’s reach. Unearthly beings from other worlds or higher realms are thought to be aware of a much wider reality than humans are, and therefore they are deemed able to impart information that cannot be found in any standard sources. A more elusive contribution of the paranormal is considered to be the invisible help in locating pertinent sources.

Like a need, acquired *information* can comprise paranormal aspects in its topic or Time Focus, but also in the method of reception. The content of the communication concerning a supernatural issue or time is regarded as salient in that it enlightens the

actor on matters which are not catered for by normal information, and facilitates action which might not be feasible to take on the basis of ”ordinary” information. Paranormal modes of information reception appear to have an essential function: without them, access to certain (especially supernatural) sources would be in the main judged impossible.

An *outcome of information* procurement may sometimes be regarded as supernatural information utilization. Even though uses of this kind seem to be rare, I would still propose that their peculiarity is in allowing people to accomplish things which they could not achieve by normal means.

Finally, a *barrier to information seeking* may prevent the individual from getting into contact with the alleged supernatural world, albeit this is evidently exceptional. In other words, it is not paranormal phenomena as such which are seen as inhibiting information action, but rather one’s own natural limitedness is a hindrance to some. In that case, the crux of the matter lies in penetrating the boundary between nature and supernature.

The overall pattern of the supernatural manifesting itself in information action can be characterized as ”dipping high” (see Figure 75): a normal situation gives rise to a need for information on normal things, which in turn leads to the acquisition of paranormal information (about supernature, or received by paranormal means or from a supernatural source), which results in using the knowledge in a normal manner. That is to say, unearthly help is seemingly got with earthly affairs. There are naturally variations on the pattern, but this is evidently the prevailing course.

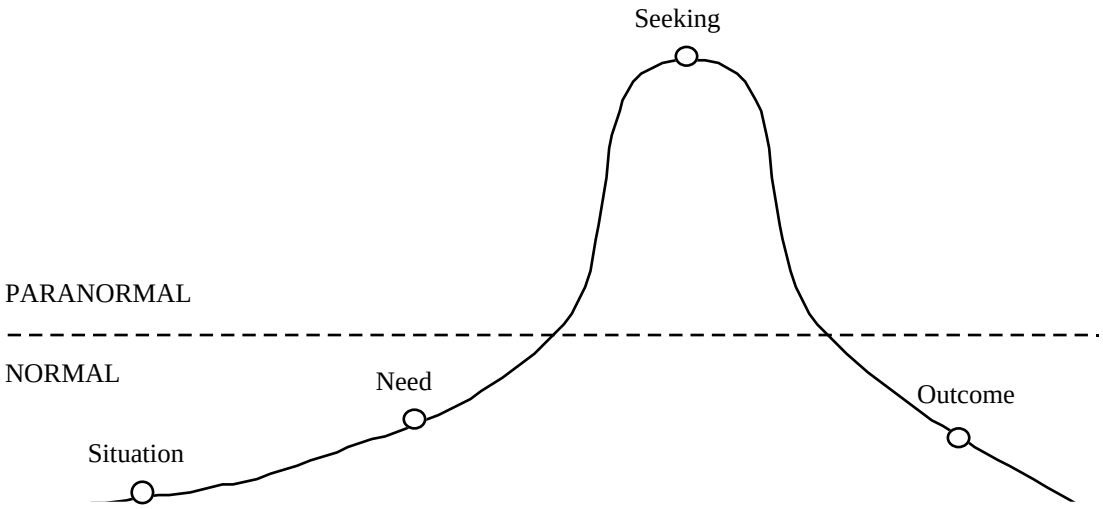

FIGURE 75. Dominant pattern of perceived paranormality in information action

Although the paranormal did not appear to be the statistically dominating category in any of the five stages (or the barriers) of information action, its significance was strikingly highlighted by the informants. Supernature was cherished as something very special by many, both as a personal experience and as a channel of precious information. All in all, the paranormal was seen as an instrument capable of bridging gaps that could not be bridged well or at all in a normal manner. From the reverse point of view, the supernatural was not resorted to when normal methods were considered as sufficient. There was no lucid sign of a competitive position or a point of convergence at which the normal and paranormal would have had to struggle for cognitive reign. Hence, it can be maintained that the paranormal is not perceived as an alternative but a complement to the normal, for they each seem to have their own area of relevancy and role to play in information action. In the final analysis, the power of supernature appears to boil down to its ability to make the world more understandable and life less troublesome, at least for some people.

It is also evident that the sphere of the paranormal is not an area of interest like any other. The supernatural is not just an object of action, but it actually tends to define how

the person perceives reality itself, too, potentially in a way that is fundamentally different from the materialistic picture of the world. Trying to say otherwise would be baseless. In other words, ”paranormal phenomenon” is both an epistemological and ontological construct. This hints at the possibility that the ”rules” of normal information action may not always apply in the context in question.

Wider vistas

The results involving supernature certainly seem to shake the consensus world view, but this piece of research did not — nor did it strive to — procure proof of the existence of paranormal phenomena, because people’s subjective interpretations were examined. Although the supernatural is the central empirical theme in the present study, its aura of mystery has not diminished a bit. If anything, the findings have revealed the versatility of the paranormal and, as a corollary, the many aspects of the experience which could be pursued in coming research. These should be titillating enough to awaken our scientific curiosity. Among the most burning general issues that ought to be attended to are: How does the supernatural as perceived affect the process of information action, and vice versa? What does information action in the context of the paranormal look like as seen from different roles or discursive stances? How do beliefs and knowledge concerning supernature relate to each other? Just how wide-spread is seeking supernatural information in society really? Are paranormal approaches to making sense of the world decreasing or increasing in our culture, or is the situation stable in this respect? To what extent is supernatural information true? Do paranormal sources of information and methods of communication really exist? What is the role of consciousness in information action?

The realm of paranormal phenomena, even though a highly intriguing and broad enough research object in itself, can be set in wider contexts, such as hobbies, world views, alternatives, or prospects. Since people’s *pursuits* may be valuable to them — as they can be a medium of fulfilling oneself — and because leisure time information seeking is a relatively poorly-known area — yet one that holds potential for theoretical innovations — in information studies, this terrain ought to be seriously examined in investigations to come.

As the dissertation has demonstrated, being involved in the supernatural can be deviant recreation, but it can also be much more than that. Oftentimes, it is more appropriate to speak of an *outlook on life, way of life,* or *life world,* because its influence on the actor’s existence appears to be so holistic. Calling such a wide-ranging activity, especially if it also extends to his work, a mere ”pastime” does not seem defensible. Reijo Savolainen (1993a; 1995a; 1995b) has done pioneering work in this domain (especially way of life), and research should be carried on along these lines. After all, here we are approaching the individual’s ”inner sanctum” of what is ultimately meaningful in his being.

The sphere of the paranormal is also an exemplar of dissident discourses. It may be regarded as an *alternative* or *complement* to the mainstream, to what is socially acceptable, to our agreed-upon reality, to the mundane, to what has been proved by science. Would that information action were scrutinized from these unusual perspectives — subcultures, taboos, atypical life worlds, spirituality, as well as moving on and going beyond frontiers — too, so that the whole spectrum of human sense-making, knowing and acting would be taken into due consideration.

The supernatural is also connected to man’s range of abilities. Sadly, questions of *human potential* have been all but completely ignored in our discipline. This negligence is unforgivable, for it would be more logical to explore and enhance our species’ own cognitive capabilities side by side with man-made tools of information action. Conspicuous exceptions in this respect have been those few studies which are not limited to reinforcing the normal run of things, but seek other, more demanding provinces of experiencing and doing, like the paranormal or unconscious.

In brief, it is high time for us information scholars to start asking ourselves what the empirical areas are that are genuinely foreign to us, but precious to the human being. By

including the above-mentioned perspectives in our analyses of information action, we may open up new grounds for further research and thus widen the scope of information studies as a branch of science.

8.3 Essence of information action

Next, the wider significance of the results is pondered on from the angle of non-work information acquisition. Those affairs are dealt with that provide important, new realizations — as compared with the body of prior knowledge accumulated in information seeking and Sense-Making studies.

Situation

The essential feature of Situation Movement State is its aspect of figurative motion by the actor. The most central implication of this subconcept is the fact that the situation needs not be at a standstill, but instead it may involve movement — ranging from a free-flowing journey to being pulled in a wrong direction. Hence, it is old-fashioned to speak about ”Situation Movement Stop”. Accordingly, the significance of information is not necessarily in its providing the means of moving, but in its *facilitating* of motion.

Although there are grounds for saying that situational information seeking dealing with the supernatural is most probably aimed at problem resolution, this does not erase the fact that the motivations for action are more varied than what is generally acknowledged in information studies today. Satisfying one’s interest, changing something, or taking care of a routine task are all impetuses that are equally deserving of scholars’ attention. It is dangerous to merely look at people’s troubles, for this course yields an overly goal-oriented and rational portrait of information action.

Information need

Asking questions is the core activity in expressing one’s need for information. The observations in this investigation decisively imply that information needs — as measured by the query, for instance — are more diverse than what earlier research has led us to believe. More sensitivity is required on the analyst’s part if the validity of the findings is a salient issue.

Information source

The results of the present study (along with many others) suggest that information scientists have been far too concerned with computerized information systems, at the expense of less artificial or less conventional sources and channels of information. Until now, research has devoted little attention to informal information seeking (Wilson 1999b, 251), which, given the unpopularity of formal sources, is quite baffling. All available information sources should be considered (Paisley 1968, 2; Wilson 1980, ch. 8), not documents only (ibid., ch. 4). As a matter of course, this state of affairs is understandable, considering the burden of the past — the adherence to library and information services — and the contemporary infatuation for technology. If traditional sources — which are obviously more ubiquitous than electronic databases — are forgotten, however, we cannot possibly claim to examine everyday life information searching. This only goes to show how deeply system-centric thinking is still rooted in information studies, despite affirmations of individualism. In effect, clinging to the development of information systems and services threatens to undermine the status of our whole discipline as a branch of science. Under these circumstances, a reality check is badly needed on all fronts.

Among information sources, the study at hand concentrated on those outside the

person himself. Yet, it may turn out that consulting other entities is usually preceded or accompanied by searching within. In future investigations, it could be wiser to refrain from contrivedly limiting the participants' options to external sources. This mode of treatment has been typical of much of information research carried out to date, since the paradigmatic assumption in our field is that information is something tangible. Such a positivist approach has inclined to disregard the actor's own foreknowledge and mind as a source of information. The critique is particularly justified, because the human consciousness includes areas which are beyond our ordinary awareness, and are thus comparable to outside sources.

Exploring unknown empirical territories (like the paranormal) has a chance of exposing novel and even epoch-making information sources. New instruments of information acquisition would have an effect on information action (see Kokkonen 1998, 25). Thus, investigators should not be content with the established repertoire of sources, but be on the constant look-out for discoveries. They should not overlook any entity which could prove useful for the human being, no matter how strange it might seem.

The analysis indicated that information sources are regarded as playing various parts in the communicative drama. Instead of assuming homogeneity — that searching for answers only involves primary and secondary sources of information — taking their different roles under serious investigation could lead into fruitful developments. Information seeking would certainly appear as more of a social practice than so far.

It is also time to acknowledge that not all information is procured according to plan (see Savolainen 1999b, 85), but much of it is gleaned by seizing the opportunity or even found by chance. In Erdelez's (1997, 419) opinion, information encountering yields knowledge that may be just as beneficial as knowledge obtained via goal-oriented information searching, so the existence of this phenomenon ought to be accepted in the canon of information seeking research. Empirical data on alternative tactics of information seeking — particularly accidental discovery — is still lacking (ibid., 413, 414), so there is ample work to do in this demesne. The findings may yet change our conceptions of what the activity of seeking information entails.

The results demonstrated that there are sectors of life in which the ”logical” thinking of cost-effectiveness does not govern information action. Nowhere was the observation more evident than in the individual's selecting suitable sources of information. This ”aberration” suggests that the scholarly community has looked at too narrow a band of information seeking environments. In addition, picking a source of information is not as simple as that, since there may well be other parties involved. This is another feature that gives searching for information a collaborative character.

Information

Becoming informed can only happen through communication. This may take a great many forms, from face-to-face intercourse to wireless telecommunication. Alas, researchers' continuing fascination with technical solutions has overshadowed the examination of man himself. Attempts at analysing our natural abilities to ”send and receive messages” beyond standard auditory and visual means have been few in number. Owing to this, so much controversy hangs over many anomalous modes of information obtainment. The fact is that each and every method of communication has had a tremendous impact — for example, the expansion of consciousness — on mankind. In this light, new ways of knowing would offer whole new possibilities to the human being (Turunen 1989, 11). That is why these reported channels deserve further scrutiny.

Information outcome

The analytical dichotomy of mental and physical application of information exposes the hopeless narrowness of looking at information use as something that solely happens in

the actor's mind. After all, man does exist in this world as a corporeal being. Unfortunately, the field of information studies still seems to be short of the realization that information can be employed physically, too, like in telling other people about a matter, or in treating an illness. In the current study, information was not too often wielded in a predominantly mental fashion. If this state of affairs prevails in other contexts, as well, one may safely claim that the majority of utilizing information has been ignored to date. In order to avoid a conceptual jumble, it might be pertinent to discriminate between information use and *knowledge use*. The former would refer to the mental process of interpreting information, or *information processing*, whereas the latter would cover the consequent mental and physical actions that are taken on the basis of the made meanings. It seems to me as though these two phenomena are frequently muddled up in the literature. The current thesis has explored knowledge utilization, leaving information processing inside a "black box".

The results concerning the effects of knowledge are significant in that they call the assumption that information is unavoidably beneficial into question. The detriments demonstrate that instead of relieving anxiety or uncertainty, for instance, information may in fact arouse them. The hurts also give us the impression that they are often not trifling matters, so we cannot really afford to sweep them under the carpet any longer. However, an elucidating thing here is that help and hurt do not exclude each other, but may concur instead.

One of the reasons given for why information failed to help the actor deserves a special mention: the lack of personal benefit. Likewise, it is enlightening to note that one argument for regarding an effect as hurtless was that the knowledge did not harm the protagonist. These comments hint at the fact that individual information may have private and/or public (positive and/or negative) influence. This would once more offer fascinating prospects for research on the communal side of information action.

The Sense-Making approach presumes that it is the constructed sense (e.g. knowledge) which helps or hurts the individual. However, the study at hand disclosed that an information effect may actually be an issue of either knowledge or its use. This is also insinuated by Rich (1997, 13), for instance. The insight communicates that information may not influence the actor unless he employs it first. On the other hand, it seems rather reasonable to propose that information may be used without having a perceptible effect (Oh 1997, 6). This is an angle on information outcomes which might prove fertile for empirical research.

Ragnar Audunson declares that most studies of information seeking are based on an instrumental perspective, that is, on the assumption that information is sought and used in order to achieve goals. He asserts that this approach is defective, for it runs into trouble when trying to account for *anomalies* — incidents in which information is not utilized or is worthless. (Audunson 1999, 70-71.) Even the theories of information seeking lean on this rationalist point of view, although there are instances which cannot be explained by such frameworks (ibid., 72). Audunson's conception is at odds with empirical results which say otherwise. For example, Sense-Making studies have established that information and its use are considered by the actors precisely as instruments, not as ends in themselves (Dervin 1983b, 18-19; Dervin 1989a, 80; Dervin 1998). The same observation repeats itself in this investigation, for nobody answered that he did nothing with the information he had acquired[28]. As to valueless information, there were a few cases in which the knowledge was utilized, but without avail. Thus, Audunson's anomalies in information outcomes may turn out to be perfectly rational, although it is quite likely that information seeking and use are much less deterministic than is generally held in our field. Anyway, I think we should take heed of Audunson's concern, and inquire into whether there are instances in which information is not used and/or has no effect, and if so, why. Should authentic deviations be discovered, our theories ought to be corrected accordingly.

Reijo Savolainen (1999a, 78) complains that information use is a troublesome concept to operationalize reliably, because theoretical frameworks dealing with it have been few in number. I would conjecture that this state of affairs is ultimately a result of insufficient empirical research on information outcomes which has led into a kind of

[28] Non-use was not, however, directly asked about from the participants.

vicious circle of deprivation. The dearth of data has brought about severe confusions, as many scholars still seem to be incapable of distinguishing between such fundamental phenomena as information seeking and use. Information seeking stops after the individual has interpreted the communication, when the message has been made sense of. Any act beyond this belongs to the province of utilizing the knowledge. But even those who have understood the difference are usually at a loss when trying to capture the essence of information use. A pivotal realization comes from Fritz Machlup (1979, 450) in whose perception information use and its effect ought to be kept separate. This distinction — which was explored in the current investigation — promises to lead information research out of the contemporary conceptual pandemonium and methodological unreliability. But even this is not enough. The two concepts (use and effect) need to be seen as consequences of information seeking, as parts of something broader which I prefer to call ”information outcome”. It is imperative to create and test (especially qualitative) measures of information outcome, because it is only through empirical research that we can hope to get hold of this elusive phenomenon (see Rich 1997, 11).

Barrier to information action

The original assumption was that barriers only manifest themselves in information seeking, with sources and information. This conception had to be drastically modified. For instance, Wilson and Walsh (1995, 12) believe that impediments may prevent information searching or use. However, this thesis unveiled that barriers can actually arise at any of the five stages of information action — situation, need, source, information or outcome. Therefore, even the name of the concept had to be changed into ”barrier to information *action*”. It is desirable that research done in future would explicitly study obstructions with every phase of the process, if a truly valid portrayal is sought.

Even though information action addressing the paranormal does not seem to be seriously haunted by barriers, these do have a more or less permanent existence. Since restrictions are still very much unknown territory, we as scholars have a duty to look into the matter. Above and beyond this argument, others would be the removal of hindrances and the contribution to comprehending information action more fully. In the spirit of Sense-Making, barriers could be analysed in more detail by asking, for example, how they emerge and how they are coped with (Dervin 1999b, 745).

Nature of information action

The empirical results revealed the rich variety of the process of information action, but shed little new light on the inner character of information action (as introduced in section 3.3) itself. If anything, they rather uphold the preconceptions on this construct. However, it has become evident that the stages of information action — situation, need, source, information and outcome — echo the rather static world of traditional information seeking research. In this form, they tend to connote objects of, fodder for, or end products of information action. The phases could be reconceptualized in a more dynamic manner. Thus, we might speak of ”situation defining”, ”need formulation”, ”source seeking”, ”information processing”, and ”situation resolution”, for example. Terms such as these would better reflect the nature of information action as a process, but they would require further theoretical and empirical work.

Leaning on J. Dewey, Carol Kuhlthau (1999, 14) declares that information seeking involves both ”acting and reflecting”. The study at hand illustrates that in fact, these both are just different varieties of action: one is physical and the other is mental. Although it may be argued that mental action (thinking) takes precedence over physical action (communicating and doing) in informational activities, the truth is that the former cannot succeed without the latter. Thus, they have a symbiotic relationship. Gilbert Ryle (1946, according to Venkula 1993, 64) proposes that man does not first ”know” and

then ”act”, but instead a process of ongoing, cyclic interplay prevails between these acts.

Mayhap the most valuable contribution of the findings to apprehending the character of information action is the revelation that from his point of view, the individual can act, but he can be acted upon by others, as well. This quality of interaction would insinuate that information action is a social process to the core, even when it is observed from the person’s own perspective only. The mosaic of physical and mental action, and the subject and object of action, on the other hand, might yet lead to highly fertile research.

The study of information action is still in its early stages. In the future, one might look into how barriers interact with this activity or, on the other hand, what sort of factors actually promote it. This contrasting notion of negative and positive ”energies” actually derives its origin from the Sense-Making methodology (see Dervin & Frenette 2000). On the lines laid down by this metatheory, the investigation at hand almost solely analysed situational features of information action. Bryce Allen (1997, 121), however, recommends scrutiny in terms of the interplay between situational and personal determinants. Considering other parameters exhibiting relative time-space constancy would be worthwhile, as well.

The model of information action assumes by default that the actor is in the role of information seeker. Yet, there are other roles — like receiver, mediator, interpreter, guide, facilitator and source/producer — in which the individual can be regarded as acting informationally, too. What is more, the actor does not have to be a person — like in the present study — but it can also be a group, organization (see de Tocqueville 1969, according to Healy 1997, 63) or even society. This hypothesis comes directly from Sense-Making. People can and do bring into existence social structures that act as entities of a higher order, and which are hence more than just the sum of their members.

Thus, the scope of information action potentially extends to the entire phenomenal world of information studies, but not farther than that. That is, information action includes all activity which involves information and knowledge (the sense associated with the information), but excludes activity that has no connection with information, like the act of mere observing. Information is at the heart of information action. The innermost nature of this activity should be carefully elaborated further. It goes without saying that social and psychological action theory could be a tremendous help here.

8.4 Process of information action

This section takes up the findings on process, but adopts the approach of theory building more consciously than the previous section. The motivation behind this is the fact that the individual results are mere fragments which only make sense when looked at as a whole. Since the paranormal apparently has little to do with the organization of processes as such, I regard the theorizing herein as applying to pastime information action in general. It must be noted that the discussion on process is mainly of analytical character, and thus it does not portray reality with precision, although this is naturally the underlying ambition. Because most of this section offers new knowledge in information studies, each novelty is not emphasized separately.

Processes of information action seem to be comprised of five structural levels or *units:* stage, need process, situation process, situation chain, and whole process. These are processes in themselves, but also build on each other hierarchically, so that parts form grander wholes. Seen from the opposite angle, it is also arguable that these wholes are divided into ever smaller segments or steps, which may better reflect the actor’s point of view. Stage is the smallest unit, while whole process is the largest one, encompassing all the others. As a result of the very much inductive analysis of processes, the five planes of information action surfaced as a strong and consistent pattern. They were an indispensable aid in examining the developments in which the interviewees had taken part, for they made a most orderly and comprehensive scrutiny of processes possible. I assess the categories to be highly valid, and as a matter of fact, it would be hard to maintain that the process units would be something else than the ones suggested here. This typology as a whole is by and large a new way to systematize

information processes.

Stage

Stage is presumed to be the basic element which makes up all the higher forms of process. On the whole, the phase types were known from the very outset of the study. They are situation, information need, information source, information, and information outcome. To be sure, the concept of information use was found too narrow, and thus it was downgraded to a subconcept of information outcome. There may be other stages of information action in existence that were not included in the current investigation, but it would almost certainly be quite intractable to make them fit into this framework which I consider to be close to perfection.

One of the most essential lessons about the phases of information action that was learnt during the analysis was the fact that a stage is not to be understood as a state, but as a *process* of its own. Due to the breadth of the research project, this aspect was regrettably beyond empirical perusal. On the one hand, stages could be broken down into more lilliputian phases, but this would probably result in a splintering effect and a subsequent loss of meaning. Nevertheless, at least information outcome is a specimen that is fairly amenable to more detailed examination. Information use may be considered as an intermediate outcome (Rich 1997, 13) of information, while the effect of the information represents its ”final” outcome (cf. King & Palmour 1981, 73). On closer consideration, though, these might occur the other way around, as well. The other stages might yield to similar partitioning, too. On the other hand, the process nature of stages means that they evolve over time, that is, they are perceived differently at different points in time-space. These two observations show well how even the five phases of information action posed in this piece of research are still fairly artificial and stiff abstractions (as concepts often are) of actual, real world processes. But even in all their simplicity, the stages as presented here obviously do possess some empirical legitimacy. Both of those perspectives on the stage as a process would require a study with a sharp focus.

The results clearly disclose the invalidity of linear conceptualizations regarding stage-by-stage progression. For one thing, a phase may recur. This idea is an improvement on the former supposition of one-time stages. For another, as one may observe, there is no one path to follow, but any phase can lead into almost any other sort of phase. Moreover, stages are not necessarily discrete or successive, but can overlap or parallel each other. This relativity makes it apprehensible why the person may find himself in more than one phase at the same time (see Byström 1999, 40).

Need process

Need process is a part of the whole process, and in general consists of one information need and all sources, information and outcomes relating to it. In other words, it is a process of information action proper, detached from its context — a situation.

The need process is composed of a *sequence* of stages. Table 72 lists all the trains which were detected in this study or which may be extrapolated deductively. They do require a few specifications. The capital letters in each category refer to the initials of the different phases in the process (e.g. ”S” stands for ”source”). The concatenations of stages are solely abstractions. That is to say, they do not report the actual number of phases of each description, nor do they disclose whether the stages are recurrent or parallel to others or not. The sequences only communicate which sort of stages are present and in which typical order.

The findings and inferences lend support to some earlier investigations, challenge others, and also offer brand new insights. Sequence NSIO (in Table 72) represents the prototypical, complete need process that begins with a need and ends in an outcome. But there are many other need processes that are less ”perfect”, for information action does not necessarily comply with the idealized, logical formula of identifying an

information need, proceeding to information search, and finally using the information (see Solomon 1997c, 1136). First of all, it appears to be true that information needs do not always lead into information seeking (see Wilson 1997, 41; Wilson & Walsh 1995, 12). To rephrase: even if information is required, it is not necessarily searched for (Sequence N). Second, it is possible that a presumed source cannot or will not give information wanted by the individual, or the person is unable to receive it (Sequences S & NS). Third, information may be looked for and/or obtained even without a conscious need for it (Sequences SI & SIO). A process of this kind could be called ”needless”, which does not mean that information searching would have no utility. According to Dervin (1989a, 80), research has demonstrated that information seeking takes place when there is a need present. This rule usually holds good with deliberate (active) searching, but not so well with casual (passive) seeking, and it does not apply at all to unsolicited information reception, that is, the accidental discovery of information. Fourth, an information outcome is not an inevitable consequence of information seeking (Sequences SI & NSI; see Wilson & Walsh 1995, 29). In addition, Sequences N and S show that a need process can be formed even by a solitary stage. From the perspective of mainstream research, all these ”deficiencies” are anomalies which have not attracted the attention that they merit. Yet, answering the question of why a process starts late or stops short may be crucial for understanding information action.

TABLE 72. Types of need process as sequences of stages

Sequence	*Stages*
N	need*
S	source
NS	need→source
SI	source→information
NSI	need→source→information
SIO	source→information→outcome*
NSIO	need→source→information→outcome*

* This sequence manifested itself in the empirical data.

The current piece of research attests to the fact that even though need processes usually further a single *situation process*, they are not always neatly confined to one such process only. A need process may in actuality take place within two or three sequential and/or parallel situation processes. Even a wider spread would be conceivable. Thus, the methodological mandate of inquiring into what kind of information action a situation gives rise to can be turned upside down by looking at what situations the need process pertains to. This would provide a novel viewpoint on information action, yet without losing the ideal of situationality. It might even constitute a more effective model of examining information action as a process. This is because when a situation is the point of departure, there is a tendency to concentrate on one isolated track of events and to disregard the potential ramifications of this process, which ”sidetracks” may, however, eventually grow into something even more prominent than the original ”main” process. In the complementary point of view, on the other hand, these extensions of the process are addressed explicitly. So, if capturing the whole picture is the goal of the study, resorting to alternative perspectives could be a helpful option. This would probably enrich our comprehension of information action.

Situation process

Situation process is a component of the whole process which is normally composed of one situation and all needs, sources, information and outcomes associated with it. The

need process(es) contained may be whole or partial (i.e shared with another situation process). The closest conceptual equivalent of situation process is the more intangible process of situated sense-making (see Figure 1 in section 3.2), but the present work handles process dynamics in a superior fashion.

The tension between *situation* and *outcome* is an absorbing one. I learnt to recognize a situation by its being a kind of starting point from which the actor sets off. There is not so much action in it as just plans to reach a goal. In the situation, the relation between the individual and his environment is highlighted. An information outcome, on the other hand, frequently comes about at the end of a process. At this stage, the person's action and/or the effects of information are accentuated. Here, the relationship between the individual and his surroundings is not such a central issue. Thus, the situation is like the beginning of a story, and the outcome is like its happy (or unhappy) end. A purpose is a natural starting point for information action, whereas applying information is a natural terminal point for it. By using the knowledge, the individual may attain his objective, or induce something that he did not even pursue.

If the reciprocal bond between situation and outcome is really as strong as delineated above, then one may question if information outcome can be treated as an element of need process at all. What speaks in favour of incorporating outcome in need process is the undeniable fact that the outcome can first and foremost be seen as a consequence of acquired information, and as such, an integral part of information action. What speaks against an inclusion like this, however, is the indisputable fact that outcome does not contribute to the function of need process which is the satisfaction of the information need, and is therefore something extra. I reckon both choices as viable, but the new development presented here would offer some fruitful insights for research on information action. There would be a more tangible sense of a process unfolding, with its suspense of the end meeting the beginning of the "story". It would be pertinent to examine here how information or knowledge aids the actor in reaching his goal (Rich 1997, 13). Furthermore, need process would be solely composed of need(s), source(s) and information, which would justify our calling it a process of information seeking instead of information action. Just like with the surrounding process, here too the information fulfilling the need would accordingly become a more conspicuous theme than before. Information seeking is for facilitating action, for it arises from a want to act and results in acts. This notion would make us more aware and less negligent of the embeddedness of information seeking in its functional context. It would be this whole of information seeking in the service of situation/outcome that could be legitimately called "information action".

The overall, relatively cogent pattern that emerges out of the results depicts the prototypical *specific structure* of the process of information action at the level of stages as situation→need→source→information→outcome. However, this is only a hackneyed generalization which conceals the true diversity of the process. The model in Figure 76 gives an inkling of the reality of information action as observed in this study (and complemented with common sense).

In Figure 76 can be seen a particularized version of the formal theory that was tentatively modelled in Figure 2. As can easily be observed from the illustration, the framework still operates at the formal level, for it is not confined to any specific research setting (within information seeking studies) nor does it soar high above information action, on the other hand, like the metatheory of Sense-Making does. The figure is an attempt at representing the process of information action as a dynamic rather than static chain of events. The elementary dynamics of the model are virtually unchanged, but the new features demand explication.

One of the first accretions that sticks out is that the stages are no longer singular but plural, as indicated by the stacks. This reflects both the potential multipartite nature of the phases and the fact that they may take place in parallel. The model is incapable of showing concurrent stages of different types, so these just have to be imagined as being there. Another adjunct are the small arrows circling the ovals. They mark the possibility of recurrence of the phases.

In the graphic model, the stages of information action seem definite, of equal proportions, and separate from each other. This is merely an illusion that is brought

about by the need to serve analytical purposes. In actuality, it is more probable that the phases are fuzzy, of disparate dimensions, and interleaved with one another. This is especially true with situation which is beyond doubt something larger and more pervasive than the other stages. Given that situation provides the immediate context for the process of information action, it can be conceptualized as a totality of time-space qualifiers, and visualized as a malleable ”small world” in which actions and events take place. Therefore, situation could be presented as a background concept underlying the others, but then it would become impossible to interrelate it with the rest of the proceedings in chronological terms. Thus in this respect, the figure (76) merely indicates the starting point of the various stages, not their comparative duration.

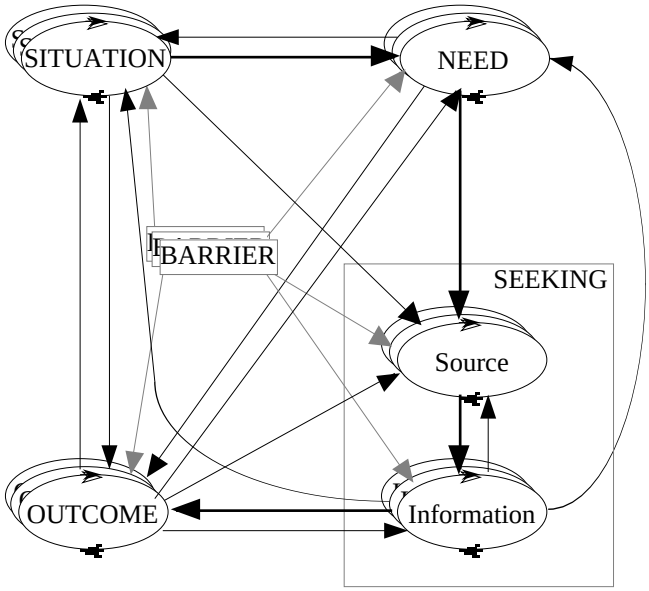

FIGURE 76. Refined general process model of situational information action

The relationships between the primary concepts are depicted by black arrows connecting the discrete ovals (in Figure 76). On the one hand, they determine the direction of influence between two phenomena, and on the other hand, they also show how the process of information seeking can proceed, from one stage to another. There are two kinds of arrows like these: thick and thin. A thick arrow stands for a typical relationship between two components or phases. This is a circumstance in which the next stage in the information process follows the previous one not only in the logical order, but also in the order which was empirically identified as the prevalent one. The thick arrow always points forwards or clockwise in the process, but only takes one ”step” at a time. Thus, for example, looking for a source is a natural consequence of having an information need. A thin arrow, in its turn, illustrates an atypical relationship between concepts. On the surface, the process in this case often appears to advance in an illogical way. The arrow may point almost anywhere in the process. So for instance, a need leading into a situation is positively abnormal.

Then there is constantly the danger of a barrier emerging at any stage in the process of information action. It is important to comprehend that barrier is qualitatively quite different from all the other concepts in the model in that, unlike the others, barrier is not a phase in the process. It is a factor which affects stages deleteriously. This is why it is located at the centre of the model, sending out grey arrows. However, it is feasible that phases also influence barriers. It would be useful, I think, to research exactly how stages and barriers impact each other. This may have corollaries for our making sense of universal process dynamics.

One may notice that the situation process in Figure 76 has no distinct point of *initiation* or *termination*. This is intentional, since the individual can start the process at any stage except information outcome, although the most likely one seems to be

situation. This finding is, however, somewhat suspect, because the Sense-Making theory and methodology — on which the present study is founded — assumes beforehand that a situation is the point of departure of the process. In my opinion, the researcher should let go of all his preconceptions and not suppose any particular order of things. Even though a situation is obviously an excellent focal point to which to fix a process, one must wonder if the individual does not often become aware of the situation as a result of being informed. This would suggest that the situation is not the first phase in the process when it is preceded by information action. In practice, the accurate determination of the starting point may be difficult, especially if the action arises from an internal impulse of the individual, not from external factors (Perttula 1994, 40). As a matter of course, the researcher cannot trace the chain of events endlessly — he must start at some sensible juncture. Perhaps it is wisest to allow the informant to decide for himself what the beginning of the process was. By the way, it may feel odd that the first stage of a situation process could be information. This eccentricity has a rational explanation: the actor consults a source in one situation process, but at least some of the information activates another, in part parallel process. So there cannot be information without a source.

Progression from one stage to the next is typically linear, for it is disposed to follow the basic route from a situation to an outcome. This does not, however, annul the fact that the process frequently seems to advance non-linearly, as well, because it takes unexpected turns, for example. In particular, the possible advance of the process after an outcome cannot be predicted in general, because there is an equal chance of it leading into a situation, need or source. In this sense, it can be contended that after an outcome, the process cannot proceed linearly, since there is no ”orthodox” direction to go in.

Finally, the individual may stop the situation process at any stage, although most probably at an outcome. Again, the possibility of the process ending in a situation, need or source can cause amazement. A situation may be the final phase when it does not lead to any further developments. The process can finish in a need if nothing is done to appease it. A source may break off the process when the individual seeks out the source for one thing, but gains information on another thing instead, and this gives birth to a new, parallel situation process. Thus, information action does not actually cease with the source, albeit in theory, such an incident might be conceivable.

The standard path (from situation to outcome) of the situation process is already rather well known, but it provides an extremely limited image of information action. Owing to this, any and all deviations from the normal course of things ought to be taken under direct scrutiny in future research. This is the only way to resolve to what degree the irregularities are real, and why they happen in the first place.

Much of the non-linearity of the process probably emanates from what Barbara Wildemuth terms the *nondeterminism* (i.e. only partial causality) of information action. This sort of process is made of successive events whose manifestation is not, however, an inevitable result of the antecedent events. (Wildemuth 1990, 329.) Although the continuity of the process was not perused in this study, the breakdown of causation was frequently quite patent when, for instance, information action could spring from noticing an intriguing piece of information by chance. Again and again, there were points in the process which were like quantum leaps that fortuitously promoted the process or turned it in new directions. It is something of a paradox that these jumps made the process continuous by creating discontinuity or gaps in it. What is most critical about these incidents is the fact that they are irreversible, that is, they cannot be derived from what has gone before in the process in question, and are therefore beyond scientific prediction. This phenomenon poses a challenge to information studies which is definitely worth exploring.

Next, it might be useful to have a bird’s eye view, so to speak, of the model in Figure 76. As one may be able to discern, I have deliberately endeavoured to present the process of information action as loops or *cycles*. Traditionally, scholars who have managed to view information seeking as a process have frequently conceptualized it as a linear course with a distinct beginning and end. Kuhlthau’s (1991, 366-368; 1993a, 342-344; 1993b, 41-52, 72-75) theory of information seeking may be viewed by some as the most famous exemplar of this. Although Kuhlthau (ibid., 112, 113) professes that

the information search process may not be as straightforward as her framework implies, this thought alas fails to be carried through in the model itself. The theory does not elucidate the ways in which the process could deviate from the standard route, and why such anomalies might come about. Even a purer sample of a linear process is offered by Donald King's and Vernon Palmour's "model of information-seeking behaviour". The reader is given to understand that the person automatically proceeds through eight stages, from the first to the last phase, without any possibility of changing the course. (See King & Palmour 1981, 71-73.)

A better-founded conception of information action would be that it is far from linear, and has no clear-cut boundaries (as we shall see later). For the want of a better term, the process could almost be called "chaotic" (see Giannini 1998, 364). This is especially true when merely the person's information behaviour is observed. Because I am not a chaos theorist or behaviourist, however, I prefer to call the process of information action "cyclic" instead (see Savolainen 1999b, 85, 105). Beneath the chaotic semblance can be found a meaningful structure (Giannini 1998, 364) which is essentially a cycle. This manifests itself as potential iteration on various scales. The same entities may be interacted with repeatedly and similar processes may be gone through with different entities, until the actor either attains his target or gives up. Thus, cyclicity does not mean going around a circle in stagnation, but rather developing the circle as long as it is not good enough.

As we inspect the situation process at a more abstract level, we can make out its *generic structure*. On this plane, only need processes and their situations are analysed. There are five universal types of situation process, as enumerated in Table 73. All of them materialized in the data.

TABLE 73. Generic structures of situation process

Structure	*Elements*
001	need process
010	situation
011	situation → need process
110	need process → situation
111	need process → situation → need process

In Table 73, the three-digit numbers in the structure categories symbolize the status of three "slots". The first slot is for need process(es) preceding the situation which occupies the second slot. The third slot is reserved for need process(es) following the situation. The binary numeral (0/1) tells us whether a slot is taken up or not in each case. The most conventional sort of situation process is of Structure 011, that is, a situation bringing about a need process. But this is only one option among many. A need process may exceptionally take place even without any awareness of a particular situation (Structure 001). This is in fact a "situationless" process. On the other hand, a situation can arise which seemingly involves no information action at all (Structure 010). Instead of a situation leading to information action, information action can lead to a situation (Structure 110). Lastly, a need process may generate a situation which spurs the person to more information seeking (Structure 111). The taxonomy does not recount the whole truth, for "need process" may actually refer to more than one such process. Under extreme circumstances, a situation process may be constituted by just a single stage — situation. At the other extreme, there is no real maximum: in theory, a process may be composed of a practically infinite number of phases. Once more, the anomalies spotted here would benefit from a follow-up study.

We must keep in mind that situations do not always follow in a linear fashion, for

they may overlap each other (Sonnenwald 1999, 180). Situation processes can also take place in parallel, and even entwine with one another. Straightforwardness is therefore not to be expected by the investigator.

Situation chain

Situation chain is an element of the whole process that includes one or more sequential situation processes forming a chain of events. I propose that the number of situation processes in the chain echoes the *longitudinal complexity* of the process. According to this arithmetic, a situation chain comprised of one situation process, for example, is simpler than a chain of two processes. In theory, there is no upper limit to the complicatedness of chains. Each following situation is either a variation of its previous condition, or an altogether new set of circumstances. In any case, successive situation processes are an indication of the fact that as time passes and things change, the motive for or objective of (information) action evolves (see Perttula 1994, 44; Venkula 1988, 9; Wilson 1977, 44) and the person's understanding thereof deepens (Venkula 1988, 9). Thus, the end of one situation process may herald the beginning of another one. This is one of the basic — but too often forgotten — tenets on which the step-taking metaphor in the Sense-Making theory is founded, as well. Although it is a fine metatheoretical realization, it is a shame that it has not extended to empirical analysis. Also in the field of information studies, information seeking is too often examined as taking place within a single, immutable situation or task. Scrutinizing the whole situation chain with all of its shifts is important if we aspire to comprehend the totality and how a former situation process affects a latter one.

Several models have come to the rescue and made significant improvements by introducing the processes of learning (e.g. Kuhlthau 1991, 1993a, 1993b) and problem-solving (e.g. Wilson 1999a, 841; Wilson 1999b, 266; Wilson *et al.* 1999, ch. 2.2), for instance, as discrete stages that represent the phases of development. These could be equated with the actor's transforming interpretation of the situation. Alas, frameworks such as these are ordinarily rather rigid and linear, because of which the processes they describe may be reckoned as close-ended and observer-defined. This means that those theories dictate *a priori* what events belong to the process and in which chronological order. This admittedly has the advantage of simplifying and easing research, but the validity of the results from such an investigation is dubious. The other alternative — which is epitomized by Sense-Making — is to conceptualize process in a totally open-ended manner, from the individual's point of view, so that neither the content nor the structure of the process is delimited. A study implementing this approach in principle yields findings that succeed in capturing the complexity of life and are more authentic. The dilemma here is "seeing the wood for the trees". In other words, it is not plain what the situation chain is as a totality. Since situations are perceived as just general contexts of information action, it may be difficult to see what larger process they are parts of. Even if their role could be identified, this does not guarantee that the situation chain could not involve elements of both learning and problem-solving, for example. Be that as it may, some sort of a synthesis of open- and close-ended process models might be an answer which could combine the best of both worlds.

Whole process

Whole process is a meaningful totality of information action and its situational context in a state of flux. This is probably what Kumpulainen (1993, 39) attempts to convey with his "whole situation". The whole process is embodied by one or more parallel, interconnected situation chains. Discounting their juncture point(s), these processes may have nothing else in common. Frequently in surprising ways, the link forms a kind of bridge between processes which would otherwise proceed in separation. Without the joint, a situation chain might not exist at all. Again, I suggest that the number of parallel situation chains in the whole process reflects its *transverse complexity.* Hence, a whole

process made of two chains would in principle be more convoluted than a one-chain process.

The ”horizontal” dimension is a supremely significant finding, because this if anything forces us to abandon linear thinking and to examine the whole dynamic skein of information action. If the scholar is after the truth, sticking to a single situation chain is simply not possible at all times. On the other hand, this does not purport that the whole story of the respondent’s life should be perused, either. Rather, it implies analysing a central situation chain, how it leads to other processes, and how other processes in turn influence the chain in question. Hence, the concept of whole process is truly relative.

Scope of process

The scope of process depicts the magnitude of activities in and the time frame of the process, relative to the human lifetime. The scope does not refer to information action only, but to lived human processes in general. Because the process of information action has not been properly explored before in our field, it is not astonishing that there has been very little discussion on the extent of this process beyond information retrieval, problem-solving, and task performance. Diane Sonnenwald’s and Mirja Iivonen’s recent article is a delightful exception in this respect, although it only mentions the issue fleetingly. The authors detect three genres of time in studies of information behaviour: ”an episode (short period of time), an interval (longer period of time with a distinct starting and ending), and eon (a long, continuous period of time)” (Sonnenwald & Iivonen 1999, 436; cf. Enzer 1975, according to Allen 1978, 140). This categorization is a creditable one, but the current study offers a more comprehensive repertoire of scopes: micro-, meso-, macro-, mega- and superprocess.

Microprocess is a sequence of acts or events that occur at a concrete micro-moment, probably within a spell of seconds or minutes. In information action, microprocess is the rough equivalent of one or two stages in interplay. A need process can also be a microprocess if it has no more than one or two stages.

Mesoprocess, on the other hand, is a string of microprocesses that take place closely together, but over a longer stretch like hours or days. In our discipline, a process of this sort is conventionally a need process, or a process of information seeking. A situation process, situation chain, or whole process may constitute a mesoprocess if it happens within a short period of time or in no particular situation.

Macroprocess includes one or more mesoprocesses, but is more than just the sum of its parts. What makes this process a single whole is the connecting thought that emerges from the destination which the actor is striving for. A process of this type has a distinguishable beginning and ending, and may last anywhere from days to years. This sounds like a typical description of the process of problem resolution. As a rule, problem-solving is not indeed a lifetime project, but often an episodic process with a relatively definite start and finish (Savolainen 1995a, 19). A situation process, situation chain, and whole process can all be — and usually are — macroprocesses.

Megaprocess, in its turn, embraces one or more macro- or mesoprocesses, and again, it is not reducible to its constituents. This progression is a process that continues through most of the person’s life span, and has no clear-cut starting-point nor terminus. As with a macroprocess, a megaprocess can be anything from a situation process to a whole process.

Finally the rarest of all, *superprocess* is a really large-scale course of events which may be surmised to involve one or more mega- or macroprocesses. It transcends the person’s life span, for its time frame may vary between decades and centuries, possibly even millennia. In actuality, this signifies that the individual’s action can be pictured as a component of a gargantuan series of episodes that does not appertain to merely one person, but to a collective. In other words, the actor proper in this process is the group, although tactile acts are, of course, carried out by its individual members. Hence, the person directly perceives and performs his part of the process only. The implication of this detection is that individual processes can be constituents of collective ones. In

information action, the person's share of a superprocess can be either a situation process or situation chain, but also a whole process, even though this last option did not turn up in the data.

When these five scopes of process are contrasted with those of Sonnenwald's and Iivonen's (1999, 436), the haziness of their three time periods becomes obvious. ”Episode” may be either a micro- or mesoprocess. ”Interval” can be understood as a macroprocess, whereas ”eon” may be construed as either a mega- or superprocess. There are thus grounds for concluding that the novel typology put forward here at the very least attempts to be less ambiguous and more exhaustive. I deem probing into the scopes of process and the relationship between the scope and unit of process an important task which will hopefully be continued in investigations to come.

Nature of process

The empirical results and theoretical meditations have brought out many quintessential features in the process of information action. These can be expressed as a list of key words: multiplicity, complexity, sequence, non-linearity, parallelism, cyclism, open-endedness, relativity, connectedness, interaction, embeddedness, infinity, change, tension and nondeterminism. Progressions exhibit immense multiplicity in their content and form. The process is inherently complex, to a degree bordering on apparent chaos. The findings signal that the process of information action is nowhere near as simple as what has been heretofore believed. It usually advances as a sequence, but is often at the same time non-linear. This is manifest especially in the parallel spots and cyclical qualities of the course. The progression is open-ended, for it has no predefined point of inception or resolution. The course is not absolute, but relative to others. According to Jaana Venkula, processes only end in a formal sense. In reality, one process and its results are always a starting point for another process. To put it more accurately, one process is either an antecedent or part of another process. (Venkula 1988, 10.) If the process were studied carefully, the observer would probably notice that it is invariably connected to other processes. This association may take the form of interaction between parallel progressions. A smaller process is generally embedded in a larger process, which is embedded in an even bigger process, and so forth, which eventually produces a kind of fractal pattern of nested processes whose scale ranges from infinitely diminutive to infinitely enormous. In essence, then, the course may extend to infinitude like the universe itself. The axiomatic kernel of the process is change. This is presumably brought about by the tension between what is and what the actor thinks should be. The anticipated outcome does not, however, automatically decide the course of the process, because it involves nondeterminism or haphazardness. These peculiarities of process present a difficult challenge to information research.

The current study assists in developing a model of information action in such a manner that this activity can be conceptualized as a real process instead of a pseudoprocess. Even so, the dissertation has merely provided the bare bones of the make-up of process. Due to the exploratory character of the piece of research, there also emerged a nearly impassable divide between the essence and process of information action. Ultimately, these territories grew so immense that each of them alone would have sufficed for one doctoral thesis. Hence, there is a gap to be bridged here: how do the substance and structure of information action interrelate? Moreover, the perusal of processes was almost totally descriptive, and so it excluded factors that might have an impact on them. A good reason remains for scholars to inquire what physical, mental, spiritual, social, organizational and cultural influences are at play in this mosaic. It is important to study processes, because analysis of this kind allows us to distinguish between factors that emanate from the process and factors that have some other basis (like personality) (ibid.).

In the process approach, the most fundamental target of evolution is of course the nature of process itself. The investigation at hand follows a common convention of treating process as a series of more or less discrete stages. But there exist other, quite different — although at once complementary — ways of looking at process. One such

viewpoint is the role of phases, as evinced by Holmes Rolston:

> ”[…] events have to be understood not just in their particular, plural natures, not in their classes, nor even in their causal connectedness or their lawlike operations, but in the parts they play in a drama. Sometimes a thing needs to be understood not merely immanently, in terms of what it now is in its own-being, but in terms of what it is becoming, as a link in a story.”
>
> *(Rolston 1987, 300)*

A more fluid standpoint is represented by Brenda Dervin (1991, 61; 1992, 65) who maintains that the researcher’s attention should be directed to processes as well as to strategies and tactics of action, not to entities and states. In other words, Dervin means that studies ought not to examine entities and states in themselves, but rather what happens between these and why. This view advocates a shift of focus from ”beginnings and endings” to ”connectings between and movements from here to there”. (Dervin 1991, 61.) The transience is mirrored in Dervin’s laying growing emphasis on Sense-Making as a ”verbing approach” instead of a noun-based one (see e.g. Dervin & Frenette 2000). What Rolston’s and Dervin’s words imply to us as information scientists is that information seeking (and action) involves constant transition (Cheuk 1999, 23) between stages that have a certain function within the process. In the final analysis, I suppose it is this idea of change and its agents which lets us investigate into the process of information action as a meaningful ”narrative”. I also believe that this is the orientation which progressive information research should adopt, for the mere determination of what happens and when is indeed nothing but a preamble.

The notion of process, when fully adopted, cannot be limited to information action alone. As Whitehead (1978, 211) proposes, all things are inevitably parts of a process. Thus, there is no component or factor inside or outside information action which would not be in a state of transformation. Some things are just more predisposed to alterations than others. This signifies that even rigidities can and maybe ought to be scrutinized as processes. For instance, research should take notice of ”if and when and how and with what outcomes” information action is transmuted or resists metamorphosis in time-space (cf. Dervin 1999a, 38).

8.5 Sense-Making revisited

Since information action may be understood as an instance of sense-making, many findings and theorizings in the current study can be extended to or converted into the domain of Sense-Making. The *results* do not have any major implications worth mentioning for the underlying premises of the Sense-Making metatheory. On the other hand, the findings do have repercussions on the process of sense-making, as symbolized by the triangle of situation-gap-use and the metaphor of step-taking.

Having acquainted oneself with the Sense-Making theory, sooner or later one will notice a peculiar ”gap” in it. As one scrutinizes the triangle of situation-gap-use, a logical shortcoming stands out: how can the individual possibly proceed from gap to use directly? There is definitely something missing here: *gap-bridging*. This concept was already explained in section 3.2, but to date, it has not been integrated into the process model (in Figure 1). In Sense-Making terms, gap-bridging signifies the person’s making sense of whatever is puzzling about the situation (cf. Savolainen 1992, 155). This activity essentially involves creating something called ”bridge” across the gap. According to *Collins Cobuild Dictionary*, ”something that bridges the gap between two things […] makes it easier for the difference between them to be made smaller or to be overcome” (Collins 1987, 170). Consequently, *bridge* is a constructed sense which allows the individual to cross the gap and possibly get some benefits (help) as a result (cf. Savolainen 1999a, 78, 80; Wilson 1999b, 253). In the domain of information studies, gap-bridging can be translated into ”information seeking”, and bridge into ”knowledge”.

The element of gap-bridging or bridge has been there in the Sense-Making theory, but it has typically been discussed in either implicit or metaphorical terms, or mentioned

in passing only (see Cheuk & Dervin 1999; Dervin 1983b, 17, 64; Dervin 1989a, 77, 78, 80; Dervin 1991, 62, 63; Dervin 1992, 68-69; Dervin 1994, 382; Dervin 1998; Dervin 1999b, 740; Dervin & Frenette 2000; Dervin *et al.* 1982, 425; Savolainen 1999a, 78, 80; Wilson 1999b, 253). This stage has by no means been elaborated to the same extent as the other phases. It is ironic that Sense-Making is concerned with almost everything that leads up to and succeeds sense-making, but says practically nothing about what and how meanings are actually made by the actor. The approach skates over the intriguing outlooks of experiencing the mental processing of senses and its potential genre-bound character.

In my opinion, the relative de-emphasis on the bridge has impoverished the Sense-Making theory and impeded information seeking research based on it. It does not necessarily feel enticing to take advantage of a framework which so skilfully evades the central issue, that of gap-bridging. By now, it should be evident why bridging is such a pivotal concept in the Sense-Making theory, at least from the point of view of information studies: without it, we could only study information needs and outcomes, but not information seeking. The bridge therefore cries out to be made explicit. The ”new” stage bridges the theoretical ”gap”, increases the complexity of the sense-making model which it has been wanting for so long, and thereby facilitates the creation of more diverse and holistic formal theories and research problems.

Another, albeit lesser problem resides in the concept of *use*. As Savolainen (1999b, 104) notes, Dervin’s ”use” does not refer to how meanings are actually employed, but rather to what (positive or negative) consequences sense-making has for the person. On an earlier occasion, however, Savolainen (1992, 155) suggests that ”help/use” also signifies the work to which the constructed sense is put. This is an important observation, although it simultaneously manages to make a mess of the abstraction. Even though use appears to connote both utilization and utility, it really does not cover the true using of created meanings at all. Because the term is liable to be misinterpreted, it would be correct to substitute a more unambiguous word for it. By following the example of information action, ”outcome” would be a suitable term. As a matter of fact, the selfsame word has been uttered quite recently by a few other authors (Dervin 1999b, 740; Dervin & Frenette 2000; Wilson 1999b, 253) in this context, too. The outcome includes the helps and hurts of sense-making (cf. Dervin & Frenette 2000). So, instead of the triangle of situation-gap-use, we now have the *square* of situation-gap-bridging-outcome (see Figure 77).

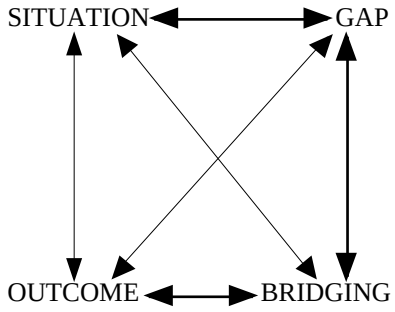

FIGURE 77. Sense-making square of situation-gap-bridging-outcome (cf. Dervin 1989a, 78; Dervin 1992, 68; Dervin & Frenette 2000; Wilson 1999b, 254)

Figure 77 displays an extended model of the sense-making process. It can be presumed that its dynamics at bottom correspond to those of Figure 76. In other words, there is no cause for expecting major structural divergences between the processes of meaning-making and information action, since the latter is an instance of the former. This being the case, the start and finish of a process, for example, may be a stage other than a situation and outcome, respectively. Here, Tuominen aims apposite criticism at Dervin’s model: it cannot be taken for granted that a use (outcome) is always preceded by a situation or gap. It is perfectly possible that the individual first finds information by accident, and only then construes a situation and gap. (Tuominen 1994, 70.) On the

other hand, the actor may well be in a situation and face a gap which does not, however, lead to bridging for some reason. What is more, the process of sense-making may take a course other than the linear situation→gap→bridging→outcome, as shown by the arrows in the new model.

The results herein urge the Sense-Making community of researchers to look at meaning-making not only within a situation, but also across situations. This does not entail ignoring the situation, but instead paying attention to the potential sequentiality and parallelism of situation processes. Such an approach promotes the understanding of continuity which is so dear to Sense-Making.

The *theoretical musings* presented in this work spotlight the important fact that like information action, sense-making is also one kind of action. In actuality, many of the central methodological concepts in the Sense-Making theory — gap-defining, gap-bridging, sense-making, step-taking and moving — do not talk so much about behaviours as about acts. The action in Sense-Making is predominantly psychical and metaphorical by nature: mental acts are pictured through physical deeds. However, the framework does also discuss literal, concrete actions of both internal and external (to the individual) sort (see Dervin 1992, 65; Dervin & Frenette 2000). It is odd, though, that the methodology does not appear to draw any distinction between behaviour and action. Actually, Dervin (1992, 65) herself seems to prefer the former term, although alluding to sense-making as behaviour is really a contradiction in terms.

Even though the Sense-Making approach is obviously a thriving enterprise and has evolved over the years, it is not perfect. To take a case in point, Reijo Savolainen (1993a, 12; see also 1995a, 11) sees as a problem in Sense-Making the fact that it ”does not pay enough attention to the individual and social preconditions which in a substantial sense determine the process of sense-making”. He (Savolainen 1993a, 96; Savolainen 1993b, 20; see also Savolainen 1999b, 100) seems to propose that factors reflecting some facets of time-space constancy (such as individual disposition or social conditions) would endow Sense-Making research with more explanatory power. Another exemplary complaint about Sense-Making is that it does not quite take adequate notice of the structure of process. This is an area which misses betterments.

It has transpired that the scholarly communities in the spheres of both information seeking and Sense-Making would have invaluable lessons to learn from each other. To begin with, both of the domains have a conceptual component that has been missing or faint in the other one. In the Sense-Making theory, this unique item is ”situation”. In the information action model, the complementary concept is ”information seeking” which can be translated as ”gap-bridging” in the language of Sense-Making. Secondly, research might evolve in both demesnes if the strengths of the other were exploited. For instance, the investigation of information action would be enriched if people’s personal meanings were addressed more expressly than heretofore. On the other hand, the Sense-Making approach appears to heavily stress mental construction, mostly neglecting physical action (Tuominen 1994, 71). The metatheory would thus gain from taking concrete bodily activities related to and following from sense-making into more explicit consideration. These lessons, if learnt, could effect a convergence of the two fields, which might ultimately lead to a singular synthesis. Thus, the theory-data linkage is not the only catalyst of theoretical growth.

It would be prudent to start the mutually beneficial amalgamation with cognate theories. The only major theory in addition to Sense-Making that involves meaning-making is Carol Kuhlthau’s (1991, 1993a, 1993b) theory of seeking meaning in the context of learning. They both depict the actor’s process as a peregrination from a negative condition to a positive one: in sense-making, the individual moves from discontinuity to continuity (Savolainen 1993b, 16), while in learning, the person advances from uncertainty to certainty (see Kuhlthau 1993a, 347). One might place the process of situation-gap-bridging-outcome within each of the six phases of learning — initiation, selection, exploration, formulation, collection and presentation (Kuhlthau 1991, 366-368; Kuhlthau 1993a, 342-344; Kuhlthau 1993b, 72-75) — so that in principle, sense-making proceeds through six steps. This could lead to wholly new insights into process dynamics. The partial or complete integration of these two frameworks would be a monumental task, because after all, we are talking about two

metatheories here. On the other hand, the results of this merger might be equally magnificent.

8.6 Methodological remarks

Analysing the data was definitely the most educational phase in this study, for it laid bare many methodological weaknesses in the empirical implementation. Most of these are talked about in chapter 4, but some specific matters are also discussed in chapters 6 and 7, as well as section 8.4. This section offers recommendations on rectifying some general problems met and on improving the standard of empirical research on information action and sense-making. Most of the remarks concern data collection.

Fragments

Executing the data analysis in the piece of qualitative research at hand was extremely laborious, owing to the great diversity and amount of interview material. It seems obvious that this can be helped by reducing the number of questions asked. For example, the focus of the time-line interview can be narrowed down without losing its situationality (Schamber 2000, 743). Furthermore, Schamber reckons that to lighten the load of the researcher, the number of interviews can be cut down. Even ten informants may provide sufficiently representative data for exploratory purposes. (ibid.) This would create opportunities for doing a deeper dig. On the other hand, if the number of participants were greater than in this study, the findings could be more readily generalized. The drawback of this would be either overwhelming work or shallow surveying. It all depends on whether the scholar aims for sense-making or number crunching. He may have to walk on a tightrope between these opposite alternatives.

Next time, voluntary partakers should probably not be recruited at all, but instead the respondents ought to be picked as randomly as possible within the selected community. In this way, the results would be generalizable to a wider population, not just to ”activists”. Should the researcher be interested in a certain coterie, say sceptics of supernatural phenomena, he can specifically sample within this group. Random sampling is naturally restricted by the availability of relevant person registers and financial resources.

The environmental and technical factors ought to be weighed more carefully than here before starting an interview. In particular, the quality of tape recordings may be ameliorated by doing the interviews in a peaceful place and/or with a good (sensitive) recorder.

In a Sense-Making study, it is vital that the voice of the interviewees is not drowned by the onslaught of interrogation. Therefore, in order to get comprehensive and sincere replies, the interviewer should refrain from posing too many or too restrictive questions to the respondents.

The most serious empirical defect in this research was that on account of gappy and unfinished processes, stage-by-stage analysis was undermined. This chiefly impacted the findings on need processes, but also those on stages and situation processes. Possibly absent phases did not cause trouble with the higher process levels (situation chain and whole process), because their examination occurred on such a general plane. The knowledge of whether any sort of information action had been manifested before and/or after a situation was usually enough. If information action is to be perused as a sterling process, it is imperative to minimize missing links and ends. Therefore, if it looks like a stage is absent, the informant must be asked about the matter in order to find out whether the phase was really not there or he just forgot to mention it. As yet unaccomplished progressions can be handled by either leaving them out or following them to the conclusion. These measures are perhaps the single most potent means of improving the validity of the investigation, as far as process is concerned. On the other hand, when an attempt is made to examine all stages of information action, there is a danger of losing sight of what is important and what is less important to the

successfulness of the process (see Tuominen 1994, 69). This hazard can be alleviated by enquiring of the respondent about the salience or role of each phase within the whole. In order to totally comprehend the process of information action, the researcher ought to identify all stages and their interrelationships (see King & Palmour 1981, 73).

Kumpulainen judges the time-line interview method to clash with the non-linear conception of time in the Sense-Making theory. When a process is scrutinized as consecutive steps, it is implicitly assumed that the individual proceeds from a problem to its resolution along a linear path. Although the notion of step-taking is above all a tool for delving into information seeking at the microlevel, it may be suspected how effective the time-line interview is in examining cyclic information searching, for example. (Kumpulainen 1993, 74, 90). The same could, of course, be said about parallel information action: the technique does not attend to this in any way. However, the method can be elaborated on the basis of the present study, for instance, to embrace non-linearity.

The heterogeneity and pervasiveness of process engenders difficulties in marking off the object of study. For example, Kumpulainen learnt that sometimes it is tricky to identify the beginning and end of a process. Distinguishing a suitable whole may be troublesome especially in extensive progressions. (ibid., 74-75.) This did not present a dilemma in my study, because an effort was made to scrutinize processes as inclusively as meaningfully possible. In the last analysis, it is up to the researcher to elect the characteristics and extent of the process that he wants to examine, which finds its expression in the research problem. The subject matter and population of the investigation are excellent controls in this respect. In practice, the range of the process is critically influenced by how the informant perceives it. Even when a whole process is analysed, as has been done here, the investigator must acknowledge that what he has caught is probably just one side of the participant's entire life situation at that time.

It is advisable to wield whatever tools necessary to make out complex phenomena and processes in particular which are often non-linear. It is likely that the reconstruction of the process could be enhanced during the interview by using "index cards" each of which represents one stage in the chain of events (see Schamber 2000, 735). Unfortunately, this auxiliary method is not without its drawbacks, as explained by Tuominen (1994, 69). Anyway, some sort of a visual representation of the process would presumably assist both the researcher and the researched in homing in on the run of events as a temporal development.

If one time does not seem to be enough, it is better to conduct the interviews in a few sessions than to be content with insufficient and superficial data. When gathering the material, one should aspire to get a complete picture of the study object. Thoroughness is one path to perfection, and triangulation is another. The latter alternative refers to using data collection methods other than interviewing, too. True, a multimethod procedure is gruelling, but its advantage is that it illustrates the subject matter from various vantage points. Perttula (1994, 45) suggests some methods — namely observation, thinking aloud, diary, and survey — which may supplement or even supersede time-line interviewing, if need be (see also Dervin 1999b, 747). Concentrating on the individual has given birth to a need to develop novel and innovative research methods (Kuhlthau 1993b, 79). But when a study focuses on the person's experiences of supernature, even more radical methods may be called for. Hence, procedures like "hypnosis, narcosis, dream analysis, free association, biofeedback, projective techniques" (Harmon & Ballesteros 1997, 426) could be applied in conjunction with normal time-line interviewing in order to bring forgotten or suppressed memories to light, for example. Of course, there is no obstacle of principle to employing such exotic methods in research in other contexts, as well.

Claims of paranormal experiences may sound incredible, especially to a researcher who is a newcomer to the domain of the supernatural. If objectivity is sought, the investigator might think about acquiring substantiating or refuting evidence from other sources, too, like documents or other people. This would grant the findings more probative force. On the other hand, such a reality check could violate the ethos of Sense-Making, so the researcher must exercise caution if it is meaning-making that he wishes to peruse.

Since posterior studies entail difficulties (with the reconstruction of events), it appears that examining information action in real time would yield more useful findings (see Ford 1977, 14). In a recent article, for example, Linda Schamber (2000, 744) encourages scholars to consider conducting interviews in real time in order to minimize memory lapses and inaccuracies. It is hard to envisage, though, how people could be studied like this. Observation and thinking aloud would be more appropriate methods here. Real-time data gathering has limitations of its own, however: it is fairly unwieldy, particularly in researching lengthy processes. Moreover, it is inevitable that the actor's consciousness of what is going on at a given time is rather incomplete. One may postulate that the "whole" picture of the process is formed retroactively. So, if investigating in real time is deemed impractical, reconstruction can be fostered by analysing as recent processes as possible.

If the investigator does a diagonal piece of research, he will be left with many unfinished processes. Since one slice in time is not necessarily enough, it is better to conduct a longitudinal study. This necessitates sticking with or at least returning to the same informants over an extended period of time that is quite possibly measured in years. Only a setup like this would do full justice to the very nature of process as a chronological phenomenon.

*NUD*IST 4* is an excellent tool in examining meanings, but desperately clumsy when it comes to analysing processes. Because the program is obviously not geared to this task, dedicated software would be handy here. The minimum requisite features would be the capability to handle open-ended linear stage-wise processes, and additional preferable features would include the support for iterations, parallel processes, and multiple process units.

The reliability of the findings can be increased by having the same or a different analyst recode the data. With the current study, however, a complete recoding would have been a waste of effort, owing to the mass of material and codes. In a smaller-scale investigation, the endeavour would be realizable. On the other hand, if a total recoding appears too taxing, even a partial one — perchance concentrating on the more ambiguous data and codes — would be better than none at all.

The use of statistical tests is not very popular in doing qualitative research, but in my opinion, they made a difference here. They provided an excellent method of separating "the sheep from the goats", so that I was able to avoid drowning in insecure data. In the name of impartiality, it must be noted however, that the absence of a statistically significant dependency by no means proves that a correlation could not exist between the two things in reality. In most cases, a relationship could not be determined simply because there were not enough observations. This particularly pertains to information outcome and barrier to information action which are as yet at a very much experimental stage of development. Because of this, many dependencies found in other studies could be neither verified nor refuted. In future investigations, the dilemma can be resolved by implementing theoretical sampling. This means that the researcher conducts a selective inquiry to make sure that each category gets at least the minimum number of hits that is required for the legitimate application of the intended statistical test. In an inductive investigation, such a procedure would at the same time guarantee that the definitive characteristics of each class can be lucidly made out. Even just a larger sample size could help in both respects.

The validity of the investigation can be boosted by verifying the data, abstractions, results and conclusions with the participants. Some might state an argument that this will not do, since the informants cannot decide the worth of theory. I could, in turn, give a counterargument: the respondents can nonetheless determine how closely the abstractions mirror their reality. In this, it is the partakers who are the experts, by virtue of experiencing the world first-hand. Thus, validation would be a unique precaution and opportunity that is frequently overlooked by self-sufficient scholars who think their own interpretations are the last word.

The big picture

This dissertation has tackled two of the most difficult issues thinkable: the paranormal and information action as a process. Research on people's perceptions of the supernatural is complicated by the utter deviance of the phenomenon from ordinary ones, which also happens to render it a sensitive topic. On the other hand, the very complexity of the information process makes its scrutiny problematical (Reneker 1993, 488). Therefore, it is not surprising that empirical breakthroughs in both domains are still out of reach. But this does not mean that the scholar should give up and go to hunt easier prey. Quite the contrary: he ought to follow the clues even more adamantly than before, if possible, until he has solved the riddle. As Carol Kuhlthau cautions us, it is unwise to constantly jump from one research problem to another when investigating into information action in context. Too many inquiries have remained isolated pieces, without any follow-ups which might verify, extend or even nullify the earlier results. It is only through a series of studies dealing with the same problem area for a prolonged time period that we can hope to gain an understanding of phenomena which may be considered as both empirically and theoretically valid and generalizable. (Kuhlthau 1999, 12-13.)

How to continue the search from here on, then? One avenue is simple replication, since according to Schamber (2000, 744), "researchers are often advised to replicate exploratory studies in an attempt to validate and improve the generalizability of results". Because the present investigation has so much room for improvement, however, I do not recommend this course. Instead, it would be better if the next study were founded on the wisdom garnered here. Some profound admonitions need to be recited in this context. The researcher ought to avoid reaching for the skies, and to concentrate on a clearly focused and demarcated research problem. This might centre upon any sector of the ground that has been covered here, in order that deeper knowledge could be attained. On the other hand, the current piece of research testifies of the fact that there are still "grey areas" in information studies which would profit from inductive exploration. In such a venture, it is important not to build too fettering a theoretical framework beforehand; more than enough leeway should be left for influence by data. This does not, however, rule out the possibility of testing earlier theory, too. To be properly able to confront the challenges presented in this thesis, preferably qualitative, multimethod and longitudinal research — maybe combined with quantitative measures — is in order.

9 Conclusion

The expedition is over for now. This doctoral thesis has in the main succeeded in reaching the goals that were set at the beginning. It has for its own part made the great Unknown somewhat more known by illuminating the paranormal and information action, and above all their fusion.

9.1 Empirical results

The purpose of the current study was to explore the content and form of information action in the context of the paranormal by means of time-line interviews. This objective was accomplished, although some research questions had less than perfect answers (see chapters 4, 6 and 7). On the other hand, some interesting results emerged as a kind of bonus (see e.g. chapter 5). The discoveries were described both qualitatively and quantitatively. The large number of findings may make it difficult to grasp the entire picture. Therefore it is worthwhile to promulgate the absolutely most significant ones here, research question by research question. *One:* the situation in which information action takes place may itself be perceived as involving supernatural phenomena. *Two:* information is mostly required about normal rather than paranormal matters. *Three:* some people consult information sources which they regard as paranormal. *Four:* information can seemingly be obtained via supernatural modes of communication. *Five:* paranormal information is felt helpful. *Six:* barriers to seeking paranormal information are relatively uncommon, but when they do arise, they are probably related to the individual himself. The answer to the last question (dealing with process) can be found in the following section (9.2), because it is theoretical by nature. The paranormal can be perceived as manifesting itself in a number of thought forms and phenomena, and practically at any stage of the process of information action.

In a way, all of these major discoveries are more or less surprising, at least to information scientists. Some of the results support but others contradict with those of earlier investigations, while many of the findings provide completely new knowledge. Alas, since there have not been any other information seeking studies in the domain of the supernatural — except for my master's thesis (Kari 1996) — only a few reliable comparisons were feasible on about equal terms. It does seem, however, that the essence — but not process — of information action in the context of paranormal issues differs from normal information action in many important ways, although they have their similarities, as well.

The findings of this piece of research have both practical and scientific repercussions. I think that in practice, the results should help everybody more deeply comprehend paranormal meanings as well as the information action linked with these. To those who are fascinated by the supernatural, this thesis can be useful in that the results may aid in forming needs for, locating, and using paranormal information, as well as in overcoming barriers to acquiring such knowledge. The findings also offer research-based information of a new kind to information providers (i.e. the media, libraries and information services) who can take advantage of the results in amplifying their services. Even hosts, maintainers and developers of information retrieval systems might encounter something constructive herein. Finally, creators and sources of paranormal information may learn from the study what sort of information people require and how it should perhaps be conveyed, for instance.

9.2 Theory

The piece of research at hand introduces a great many novel categories, several subconcepts, and even three basic concepts. Some of the constructs specifically deal

with the paranormal, but most of them are pertinent to the wider context of people's everyday life, leisure time, interests, and hobbies. The abstractions in this study have numerous theoretical implications for information seeking research in general. In my view, the most central ones are — again, research question by research question — as follows. *One:* the motivations behind searching for information are much more heterogeneous than presumed by the rationalistic ”school of problem-solving”. *Two:* the questions representing information needs are more versatile than what has been believed to date. *Three:* the present-day scientific endeavour in our field pays inordinate attention to documentary and especially electronic sources and systems, at the cost of personal and less technical originators and providers of information. *Four:* exploring the perceptual potentiality of the human being for obtaining and processing information has been forgotten in information studies. *Five:* it is proposed that the previously ambiguous ”information use” is relegated to the subordination of the more general ”information outcome”. This is a process whose other ”substage” is information effect. *Six:* barriers do not disturb information seeking only, but can emerge in any phase of the process. *Seven:* two fundamental process dimensions — unit and scope — were identified. It was found that the process of information action is a complex, non-linear and multilevel phenomenon. Many of the categories and concepts in the current investigation can be exploited not only in information studies, but also in Sense-Making. The modified and new abstractions will almost surely lead to interesting and fruitful advances in research.

As a whole, the concepts and their interrelationships constitute a framework which pertains to three theoretical perspectives: information action, process and sense-making. The thesis advises the scholarly community to replace the mechanistic term of ”information behaviour” with that of ”information action” which underlines the intentionality of human existence. The study developed a model of process, as well, which outlines the processes of information seeking and action in unparalleled depth and width. The Sense-Making theory was not spared from revisions, either, which principally concern the concepts of gap-bridging and use. The greatest theoretical merit of this piece of research is, I believe, that of contributing to our understanding of information action as a genuine process. Among other things, this conceptualization has consequences for the methodology of information seeking research.

The model of information action put forward here aspires to address the essence and process of the whole that is constituted by the phenomena of situation, information need, information source, information, information outcome, and barrier, as seen from the individual's point of view. The frame of reference is in my view abstract enough to be applicable to investigating information action in any free time context. On the other hand, its generality also signifies that it cannot be directly employed in empirical research. However, I believe that the model provides a good basis for working out explicit operational constructs which can be so utilized. The strengths of the framework include the facts that it is comparatively easy to modify (by transmuting current concepts/stages or their interrelationships), extend (by adding main concepts/stages or interrelationships), specify (by appending subconcepts or interrelationships under the main concepts), or restrict (by focusing on certain elements). What is of utmost importance is that the model appears to work, since for the most part, it has empirical support behind it.

I wish to emphasize, however, that the framework is still in its infancy: it is my first version of a general process model of information action. The frame of reference is not ”ready” in the sense that it could not change any more. It is in part hypothetical, chiefly because of the exploratory make-up of the study and the privation of prior relevant research. In all likelihood, the model holds deficiencies and inaccuracies. As a matter of fact, all theories are more or less in the making; that is why they are often in a state of flux. Theory-construction itself is a form of sense-making, and for this reason, a theory develops step by step in hermeneutic circles. According to this principle, it is thus to be expected that the framework built herein will in many respects mature in the future. These alterations will come about through further empirical and theoretical research. To be able to talk about a *theory* of information action, we should develop the concepts which lead to propositional statements, and make some serious attempt at creating operational definitions for those propositions. The model would also require testing in

order that its legitimacy could be ascertained. These steps are quite necessary, but they go beyond the scope of the present study.

As far as I know, the current doctoral dissertation is up to now the second study to develop a model of information seeking specifically founded on the Sense-Making metatheory. Since the first framework by Halpern and Nilan (1988, 175) was inadequate for the present piece of research, a more suitable formal Sense-Making theory had to be derived from its metatheoretical counterpart. However, the model of information action half draws on information seeking research, so it is not pure Sense-Making. Hence, the formal theory describes phenomena in a particular field of inquiry, and yet retains its grounding on the metatheory. The coexistence of the Sense-Making theory and information action model has given rise to an illuminating cross fertilization of sorts which has not resulted in the unification of the two, for they both have their own place. Rather, the two frames of reference have together contributed to understanding both of them from each other's angle.

In the light of the interrogation presented here, the systematic bringing down of Sense-Making from the metatheoretical plane, through the formal level, all the way down to the substantive plane seems to be certainly possible, quite justified, and fairly beneficial. The abstractness of the Sense-Making theory demands its explication if it is to be properly used in empirical research. This study provides some suggestions as to how to go about the undertaking, and elucidates these with an application of Sense-Making in research. The exposition of Sense-Making has proven helpful in many ways: it promotes empirical investigation as well as our comprehension of sense-making phenomena and theory. In sum, it all starts to make better sense. How can we possibly not develop Sense-Making into something more tangible and useful, then?

On the whole, one may notice that this dissertation has started out to evolve Sense-Making in just the opposite direction than the creator of the approach — Brenda Dervin — in her recent work. Where Dervin aims at generalizing the ontological and epistemological presumptions of the methodology to all human communication, I strive for specifying the metatheory to deal with information action. On the other hand, universal models of information seeking are typically not based on clearly articulated assumptions about the nature of information, communication or the subject. In this respect, they differ from the process model of information action elaborated in the current thesis. Thus, the middle-range framework herein embodies quite a welcome departure from both traditions.

Eleven years ago, Elizabeth Hewins (1990, 147) surmised that to endeavour to create a single theory of information seeking may be too early or fruitless. There are some prerequisites for a general model of information seeking: it has to apply to different people in different situations or contexts (Limberg 1998, 56). The piece of research at hand has brought the dream of unity one step closer to reality. The process model of information action that has been elaborated herein is proffered as a prototype of a framework which is in effect so universal that it can be employed in examining information seeking in almost any conceivable milieu. However, Limberg (ibid., 230) points out that it is better to have a repertoire of divergent models of information seeking as a process than only one generic frame of reference. This is true, but a theory of a higher order would have the power to unite more specific theories, and thus to occasion more dialogue between the representatives of the various points of view. Hence, in much the same manner as the Sense-Making approach has been a mother lode of some communication research, the new framework of information process could be a mutual core source of inspiration from which scholars can draw and to which they can add, too. But we must remain watchful of not instituting an intellectual tyranny in the process. That is why the profusion of substantive theories is crucial: they essentially function as gauges of the validity of the formal theory.

Hewins (1990, 160) also states that novel research directions may give rise to novel paradigms. The process approach is a comparatively new perspective in information studies, and probably more pervasive than any other. I hereby propound pioneering the novel theoretical and methodological construct of *processism* with a status of not metatheory, but paradigm. If change is accepted as the sole permanent law of nature, it may be with justice claimed that processism surpasses all other scientific paradigms

with its universality. It will bring us to reconceptualize practically everything, and consequently effect an inner revolution. As Arnold Mindell (1985, 74) puts it: ”Though the very idea of process is very very old, process consciousness will be a new form of thinking for many people because prevailing western consciousness is chronological and state oriented.” What with the world changing at an evidently increasing pace, there is no room for ”statism” any longer.

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Appendix A: Letter to potential interviewees[29]

A STUDY ON NEEDS AND SEEKING OF PARANORMAL INFORMATION

My name is Jarkko Kari, and I am studying information studies at the University of Tampere. I am currently doing my master's thesis of which interviews are one, and a survey another main part. My piece of research is supported by Ultra magazine.

The purpose of my study is to find out what, how and why people need, find and acquire paranormal information. I am especially interested in how people's way of life, values and personality affect seeking paranormal information. By paranormal information I here mean information about all supernatural phenomena that contradict the known natural laws.

The enclosed questionnaire is available to all who are interested in the matter. Relatively general things are enquired about in it. Because of this, I am also conducting interviews in order to get deeper information on these issues.

You have been randomly chosen to be one of the 20 privileged readers of Ultra who got the opportunity to participate in interviews in addition to the survey. You will not be asked about so personal things that somebody would be able to identify You on the basis of Your answers. The information given by You will remain absolutely confidential, since Your replies will not be seen or heard by anyone else than me (the researcher myself), and it will only be used for research purposes.

The results obtained from the study can be used to chart helpful sources of paranormal information as well as to improve the mediation and dissemination of paranormal information, in a word to identify and remove problems which people - maybe You, too - have in finding paranormal information. So it is important that precisely You do Your part by partaking in both the survey and the interview. The results of the investigation will probably be published at least in Ultra magazine during next winter.

If you wish to avail Yourself of Your privilege by taking part in a personal interview, I request that you contact me as soon as possible. The interview only presupposes that before it, You have filled in the questionnaire, because they are closely linked to each other. If You reply by mail, include your phone number also. My contact information can be found on the cover of the questionnaire.

If you have not responded to me in one way or another **by 18 June 1995**, someone else will be selected in Your stead to be interviewed.

Tampere, 9 June 1995

Jarkko Kari

[29] Translated from Finnish.

Appendix B: Interview scheme[30]

Before the interview begins, it must be made sure that the interviewee has filled in the questionnaire. At first, the researcher and the research subject are introduced[31]:

My name is Jarkko Kari, and I am studying information studies at the University of Tampere. I am currently doing my master's thesis of which interviews are one, and a survey another main part. My piece of research is supported by Ultra magazine.

The purpose of my study is to find out what, how and why people need, find and acquire paranormal information. I am especially interested in how people's way of life, values and personality affect seeking paranormal information. By paranormal information I here mean information about all supernatural phenomena that contradict the known natural laws.

You have been randomly chosen to be one of the 20 privileged readers of Ultra who got the opportunity to participate in interviews in addition to the survey. You will not be asked about so personal things that somebody would be able to identify you on the basis of your answers. The information given by you will remain absolutely confidential, since your replies will not be seen or heard by anyone else than me (the researcher myself), and it will only be used for research purposes.

The results obtained from the study can be used to chart helpful sources of paranormal information as well as to improve the mediation and dissemination of paranormal information, in a word to identify and remove problems which people - maybe you, too - have in finding paranormal information. So it is important that precisely you do your part by partaking in both the survey and the interview. The results of the investigation will probably be published at least in Ultra magazine during next winter.

Was there something in the questionnaire that you did not understand or that was difficult to answer? *Unclarities are sorted out.*

In this interview, I will ask how you seek, find and use paranormal information in practice. By "information" I here mean any written, oral, visual or audio material or presentation which you think helps you, or in which you are interested for no particular reason.

Then we get to the interview section proper: all themes are gone through one question at a time, unless the instructions say otherwise.

X Background

1 How did you get to know paranormal information?

2 Why did you become interested in paranormal information?

A Information need

1 Can you remember a situation in which a) your own knowledge or skills in the area of paranormal information were not enough and you had to seek for an answer or advice somewhere else (e.g. you had to make a decision, resolve a problem, understand something or get further information about something), OR b) you were interested in some paranormal issue for no particular reason, and you wanted more information on it?

2 What was this situation like?

[30] Translated from Finnish.
[31] The sentences in *italics* are instructions for the interviewer.

3 On what topics did you want information or advice?

If the discussion is halting, the respondent can be given the following list of subject areas:

- astral projection
- astrology
- aura phenomena
- biorhythms
- fortune-telling
- spirits
- yoga
- death / reincarnation
- number mysticism
- universe
- magic
- meditation
- occultism
- healing methods
- parapsychology
- earth energy
- prayer
- spiritualism
- UFOs

4 Why did you feel the need for information/advice specifically on this matter?

5 Did you want information because you were interested in it for no particular purpose, or did you have a problem or something, or for both reasons?

6 Did you want information for spiritual or mundane reasons?

7 How were you going to use/exploit the obtained information? What goal/goals did you believe you would achieve by applying this information?

B Situation

1 Think about that situation as if in that situation you had been walking on a road towards your destination, goal. As how free did you experience your movement along the road? Was it stopped, free or in between? Why?

2 How probable did attaining the objective appear? Did your attempt seem to succeed, fail or something in between? Why?

3 As how important did you regard reaching the target?

a) extremely important
b) rather important
c) hard to say
d) rather unimportant
e) totally unimportant

4 As how stressful did you feel the situation? Why?

a) extremely stressful
b) rather stressful
c) hard to say
d) only a little stressful
e) totally stressless

5 As how urgent did you consider straightening out the situation?

a) extremely urgent
b) rather urgent
c) hard to say
d) only a little urgent
e) totally unhurried

6 How complex was the situation in your opinion? Why?

a) extremely complex
b) rather complex
c) hard to say
d) rather simple
e) extremely simple

7 Was the situation connected with other situations, or was the situation a part of some larger totality of situations?

8 Have you been in a similar situation earlier? How often?

a) every day
b) 2-3 times a week
c) once a week
d) 2-3 times a month
e) once a month
f) 2-3 times a year
g) once a year
h) less than once a year

9 Was there something else in the situation worth mentioning in your opinion?

C Gap

1 What questions did you pose to yourself in this situation? About what individual things did you want information?

2 Why did you ask precisely these questions in this situation?

With each important question, themes D and E are gone through.

D Desired use of information channel

1 In which form did you want the answer to your question (above)? In written, oral or other form? Why?

2 How much did you want information on this issue? Why?

a) all possible
b) more than necessary
c) only that which was necessary
d) less than necessary
e) nothing

3 Which one of the following was most important to you when you wanted information?

a) width or holistic nature of information
b) reliability of information
c) getting information cheaply
d) getting information with little effort
e) direct applicability of information to situation
f) depth or specialization of information
g) novelty of information
h) accuracy of information
i) getting information quickly
j) intelligibility of information

Theme E is gone through separately with each information provider.

E Actual use of information channel

1 Where or to who did you go to find out about the matter? How did you proceed?

2 Why did you want to go to look for an answer to your question/problem exactly there / this way? Why did you see this as a suitable means to acquire information / settle the affair?

3 In your opinion, was your position higher or lower than that of the information provider? Why?

a) much higher
b) somewhat higher
c) same
d) somewhat lower
e) much lower

4 How ”welcome” did you feel yourself when seeking information from this information provider? Why?

a) extremely welcome
b) rather welcome
c) hard to say
d) rather unwelcome
e) totally unwelcome

5 How did you formulate your question to the information provider?

6 In which form did you get the answer? In a written, oral or other form?

7 How well did the obtained information answer to your original question?

a) perfectly
b) rather well
c) hard to say
d) rather poorly
e) not at all

8 As how useful did you regard the acquired information?

a) extremely useful
b) rather useful
c) hard to say
d) rather useless
e) totally useless

9 Did something in the received information cause dissatisfaction? What?

10 As how useful did you reckon the information provider?

a) extremely useful
b) rather useful
c) hard to say
d) rather useless
e) totally useless

11 Did something about the information provider arouse dissatisfaction? What?

12 Was there anything in looking for an answer in place X / way X which prevented you from or hindered your finding or obtaining the information?

a) you dared not ask or look for information
b) you reckoned you could handle the problem without additional information
c) somebody/something did not want to give you the information you needed
d) somebody/something was not able to give you the information you needed
e) your education was insufficient for finding or understanding information
f) acquiring information would have taken too long
g) acquiring information would have cost too much
h) acquiring information would have been too troublesome
i) information was too far away or otherwise out of reach
j) information did not exist
k) your language proficiency was insufficient for understanding information
l) you could not understand the obtained information

13 Have you sought information/advice/answers from this same information provider earlier? How often?

a) every day
b) 2-3 times a week
c) once a week
d) 2-3 times a month
e) once a month
f) 2-3 times a year
g) once a year
h) less than once a year

14 Did you seek information or advice somewhere else, too? Why? Was the information acquired from place X / by method X not enough on its own? Did something remain obscure? *If the respondent consulted another information provider, return to E1.*

15 Did you think there could have been information yet elsewhere, but you did not check it up after all? Where? Why did you not check it up?

If there are still more questions, return to the beginning of theme D.

F General things about actual use of information providers

1 How much trouble did you take with finding the information? Why?

a) very much
b) rather much
c) hard to say
d) rather little
e) very little

2 How prone were you to resort to outside help to find information? Why?

a) you resorted to an outsider without own attempts at finding information
b) you tried to find information yourself, but most of the seeking was done by someone else
c) you were responsible for seeking information with somebody else, working equally to find information
d) you strove to find information yourself (doing most of the work), but at some stage, you resorted to outside help
e) you did not need outsiders to help you at all

3 How concentrated were you on information seeking? Why?

a) totally concentrated; you did no other things
b) rather concentrated; you only did a few other things
c) hard to say
d) rather poorly concentrated; you did many other things
e) not concentrated at all; you did not seek information at all

4 Were there some other significant aspects in seeking or finding the information that you would like to bring up?

G Information use

1 How did you apply the obtained information/answer/advice?

2 How did this help or hurt you?

3 Was there something else worth mentioning in information use?

4 Did this situation lead into some other situation or did brand new questions arise to which you wanted an answer / problems arise that you wanted to resolve? *If the answer is "yes", return to the beginning of theme A or C.*

H Current information needs

1 Do you at the moment have things in your mind about which you would like to find out / about which you would need information or advice? *If affirmative, return to the beginning of theme A and go through the themes as applicable.*

I In conclusion

1 Do you still wish to comment on this interview? How did you experience it? How did it feel?

2 Was some part of the interview particularly difficult?