Information and Higher Things in Life: Addressing the Pleasurable and the Profound in Information Science

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The article discusses lower and higher contexts for information phenomena, and argues that there is clearly a need for a more concerted research effort in the latter sphere. The discipline of information science has traditionally favored lower contexts—like everyday life and problem solving—that are neutral or even negative by nature. In contrast, the neglected higher things in life are pleasurable or profound phenomena, experiences, or activities that transcend the daily grind. A literature sample of the scarce information research related to higher things indicates that beyond the spotlight of mainstream research, information processes often seem different and there may be significant dimensions of information phenomena that have been overlooked. Therefore, the article outlines a contextual research area in information studies to address higher things from the perspective of information. It is concluded that optimal functioning requires bringing the lower and higher sides to balance in information science. This would offer a rare chance to promote holism and interdisciplinarity in the field, and to make the discipline more relevant to the human being.

Introduction

It is now commonly agreed upon that information activities are inextricably interwoven with context. In this article, we adopt Talja and colleagues' (1999) general definition according to which context can be seen as any background for information phenomena. Because context is such a pivotal factor, consciously selecting and theorizing about context should be one of information scholars' top concerns. This is a critical (in both senses of the word) but constructive writing about research areas in information science, somewhat in the vein of Dervin and Nilan's (1986) seminal piece, which

focused on the tug-of-war between the system and individual *perspectives* in information seeking research, and advocated the users' point of view. In turn, this article discusses lower and higher *contexts* in information studies or information science, as our discipline is variously called (cf. Zhang, 1988), and argues that a programmatic research effort concerning the higher sphere is sorely needed.

We believe that the time is now ripe for information science to address big questions like, "What makes life worth living?" (see Seligman & Csikszentmihalyi, 2000, p. 5). To this end, this article: displays the deficiency of the lower slant, examines what higher things in life are, why they should be studied, what earlier information studies have found out about them, as well as how they can be conceptualized and incorporated into analysis in information research. Basically, the article aims at theoretical development by using earlier literature and creative thinking. Information behavior and context are the areas to which the current article relates most, but it also has a lot to say to the whole field of information studies.

Lower and Higher Things

Lower Things

The following account sounds so familiar from at least the angle of information seeking research as to be almost uncanny. It is illuminating to peek at the alleged status of psychology a few years ago:

> … why has psychology been so focused on the negative? Why has psychology adopted the premise—without a shred of evidence—that negative motivations are authentic and positive emotions are derivative? There are several possible explanations. Negative emotions and experiences may be more urgent and therefore may override positive ones. … Therefore, on one level, psychology's focus on the negative may reflect differences in the survival value of negative versus

positive emotions. . . . There are also historical reasons for psychology's negative focus. When cultures face military threat, shortages of goods, poverty, or instability, they may most naturally be concerned with defense and damage control. (Seligman & Csikszentmihalyi, 2000, p. 13)

Surprisingly, a similar situation appears to dominate in organizational behavior, an academic field that has "arguably given relatively more attention to managerial and employee dysfunctions and problems in the workplace. Representative examples would include the search for better ways to motivate and lead marginal, inert employees; correct deficient styles, skills, and abilities; improve dysfunctional attitudes and behaviors such as resistance to change; and more effectively manage conflict and cope with stress and burnout" (Luthans, 2002, p. 57).

Is it possible that such a negative mindset in fact characterizes the human sciences at large? If so, is there any reason to suppose that information science would somehow be an exception in this regard? Quinn (2005, p. 82) claims that at least library literature does not fare any better than psychology or organizational behavior, for managerial topics like "reluctance to change, stress, coping, burnout, interpersonal conflict, performance and motivational problems, and communication difficulties" are quite prevalent there. In the area of lending, a cursory review by Mitchell (1988) indicated a similar imbalance:

> Most of the literature appears to have been written under the assumption that only negative reinforcement techniques (e.g., fines, blocking further borrowing, legal action, etc.) can be effective in minimizing the problem of overdue library materials. (p. 87)

It is our contention that when research in the larger field of information science has paid attention to context, it has almost without exception done so by implicitly or explicitly focusing on *lower things in life*, which are (emotion- or motivation-wise, for example) experienced as neutral or even negative and often also as superficial phenomena. Our continuous monitoring of information studies—especially the major journals—for the last decade or so (about 1995–2006) confirms the impression of lower contexts occupying an absolutely overwhelming position in research. This realization only emerged after we discovered higher contexts.

A typical lower sphere is people's *everyday life*, its problems and routines. With "everyday life," we refer not to leisure, but to the more general quality of "dailyness," that is, the familiarity of activities and affairs, repetition, routine—in short, in what order things are "normally" in life (Heidegger, 1978; Savolainen, 1993). Everyday life offers a safe but conservative perspective on informational phenomena, because it emphasizes controlling life in order to preserve a status quo. For instance, Savolainen (1995)—in his seminal article on everyday life information seeking—speaks about "way of life," which is perpetuated by "mastery of life." To us, everyday life represents lower things of existence, for the

essence of that domain are basic events (e.g., cleaning or doing one's work) that are conventionally perceived as relatively uninteresting and involuntary (see Heidegger, 1978), even drab. In *Being and Time*—his most influential book—Heidegger (p. 422) noted how "everydayness" dominates people's behavior. Maffesoli (1996) later specified this view by arguing that everyday life is an area marked by conformity, rules, and rituals. He even sees the everyday as a region of unreality: "Analysis now shows in more and more ways that both political life and everyday life are to a great extent made up of theatricality, superficiality and spectacular effervescence" (p. 70).

The majority of information research has focused on occupational information phenomena. This is inherent in bibliometrics, user studies, and most aspects of library research. Information scientists usually confine everyday life to that part of daily living that takes place outside work or study (e.g., Agosto & Hughes-Hassell, 2005; Savolainen, 1995). The distinction between free time and work is therefore quite significant. Despite its certain utility, however, the division tends to cloud the fact that work is—after a closer analysis—really the most central part of everyday life (cf. Hektor, 2001), and therefore the accumulated research legacy of information studies is basically that of information processes in everyday life. The probability of discovering something truly novel would be higher if information scholars wishing to pursue innovative research went beyond the everyday realm, which has already become so well known from the angle of information phenomena.

Problems are an integral part of the everyday paradigm in that they are customarily regarded as complicating life, as upsetting the state of harmony. By "problem," we refer to its primary sense: "an unwelcome or harmful matter needing to be dealt with" (Compact Oxford English Dictionary, 2006). The popularity of presuming or studying problems as the trigger for informational activities (e.g., Erdelez, 2000; Hartel, 2003; Ross, 1999) is a direct testimony to negative thinking in information research. Allen (1996, 1997), Belkin, Oddy, and Brooks (1982), Hawk and Wang (1999), Wersig and Windel (1985), Wildemuth, Friedman, Keyes, and Downs (2000), Wilson (1999), and Yang (2001) are just a few, overt examples of such "problematizing." Perhaps the most extreme view has been expressed by Allen (1996, p. 12) who declares that "all information seeking is problem solving." Even the conception of discontinuity in the Sense-Making methodology (e.g., Dervin, 1999) would seem to betray a problem orientation. The fact is that most uses of Sense-Making have construed gap (see Table 3) and discontinuity as problem-focused, but a careful reading of Dervin at a higher, metatheoretical level suggests something far more complex. Dervin's emphasis on discontinuity comes from philosophic thought regarding mandates of the human condition, and these are often expressed in spiritual texts (see next subsection, Higher Things). These insights were proposed by one of the referees, who seemed to have a deep understanding of Devin's work.

A similar, negative perspective dominates conceptualizations of *information needs,* too. These are usually characterized

with expressions like those in Table 3 (left column). It is obvious that *information failures* (MacIntosh-Murray & Choo, 2006) and *barriers to information processes* (e.g., in Brown, 1991; Kari, 2001) are yet other components of lower things in life. To summarize, the negative mentality in information studies conceives of people as somehow deficient beings or even as "'patients' whose symptoms require diagnosis" (Julien, 1999, pp. 586–587).

A major drawback of the everyday and problem approaches is that research in these lines tends to construe a rationalized (see Ross, 1999) and reductive model of human information behavior. Such a bias in information studies is, in a way, quite understandable given the seeming pervasiveness of everyday concerns and the shared norm of conventionality (i.e., avoiding deviance) in scientific communities. Martin, for one, portrays science as unwilling to consider new ideas. He maintains that—owing to vested interests—the bulk of resources is targeted at analyzing immediate problems in society. This leads to a negligence of "foundational questions, anomalies, and unconventional ideas" (Martin, 1998, p. 609).

Higher Things

While quotidian research (above) is undoubtedly valuable, it is imperative to acknowledge that it only covers half of what it is to be human. From a subjective or intersubjective point of view, there are many higher things in life (e.g., Dilman, 2000) than coping, suffering, working, performing tasks (e.g., Allen, 1996; Järvelin & Ingwersen, 2004), solving problems, and fulfilling our basic needs. Seligman and Csikszentmihalyi (2000, pp. 7 & 13) likewise talk about "highest qualities in life" and "human strengths" in an article that has become one of the cornerstones of positive psychology. *Higher things in life* are usually positive human phenomena, experiences, or activities that transcend the daily grind with its rationality and necessities. They exhibit plenty of variety, so it is desirable to find or create a comprehensive schema to organize the higher topics in some way. A simple but tenable division is suggested below.

Turning to higher things is probably an attempt to either escape the dullness of the everyday or become more mature (see Heidegger, 1978). Indeed, the two basic categories of higher things in life seem to be the pleasurable and the profound (see Table 1). This division comes from Seligman and Csikszentmihalyi (2000) who, for some reason, use the confusing words "pleasure" versus "enjoyment," which are synonyms. *Pleasurable* is defined as "something that you find very enjoyable and satisfying" (Collins Cobuild English Language Dictionary, 1987, p. 1099; see also Seligman & Csikszentmihalyi); it is anything a person subjectively desires to do or experience in order to get delightful sensations. Such things of good feeling contrast with those lower things that are in particular unpleasant or downright painful. *Profound,* on the other hand, is something regarded as deep (Collins Cobuild English Language Dictionary, 1987, p. 1147) and sublime; it is anything that objectively reflects humanity's possibilities for reaching its full potential (see

TABLE 1. Exemplars of pleasurable and profound things.

Pleasurable	Profound
art	altered states of consciousness
beauty	altruism
celebration	betterment of the world
entertainment	creativity
fun	emotion
hedonism	ethics
hobbies	human development
humor	intuition
leisure	meaning of or purpose in life
playing	paranormal or supernatural (the)
relaxation	positive thinking
sexuality	spirituality & religion
wealth	values & higher needs
	virtues
	volunteering
	wisdom

Note. Many of these have been presented by, e.g., Levin, 1988; Maslow, 1968; Seligman and Csikszentmihalyi, 2000; Sheldon and King, 2001; Veal, 1989.

Seligman & Csikszentmihalyi). Such idealistic things are the antithesis of the mundane, matter-of-fact reality.

The examples in Table 1 (a) clarify the features of the pleasurable and the profound, (b) provide support for the bisection, and (c) facilitate operationalizing higher things in life. The current position of the individual items in the chart—that is, whether they should go under "pleasurable" or "profound" in each case—is necessarily suppositional, however, for the division has not been analyzed empirically. Furthermore, the classes of pleasurable and profound are merely analytical constructs, for they are not mutually exclusive. Spending leisure time, for instance, may be the main purpose in someone's life. Then again, it may be argued that the *highest* things are those that are both pleasurable and profound. As one can easily perceive from the discussion and examples above, the higher aspect of life constitutes a heterogeneous yet identifiable area. It would not be unreasonable to assume that there is something "higher" in every individual's life every day, which points to its universal nature (cf. Seligman & Csikszentmihalyi, 2000).

But what is it that makes higher things in life noteworthy in this world of ours? To begin with, research has ascertained that higher things prevent mental disease (Seligman & Csikszentmihalyi, 2000; see also Maslow, 1968) and significantly influence work performance (Luthans, 2002). Maslow (1968, p. 202) suspected that higher things are "synonymous with selfhood, with being 'authentic,' … with being fully human." Even though higher things may not be necessary for our survival (see Seligman & Csikszentmihalyi, 2000), nor always so profound, we nevertheless claim that they are the special "ingredients" that make human life meaningful, shape our very identity, and give us the reason to live in the first place (see Seligman & Csikszentmihalyi, 2000).

On the whole, it does seem that higher things in life form an important realm of inquiry. It should not come as a surprise, then, that many of them have been systematically investigated in several provinces of the academe: at least anthropology,

consciousness studies, developmental science (e.g., Magnusson, 1999), leisure science, pedagogics, philosophy, psychology (especially humanistic psychology, parapsychology, positive psychology, and transpersonal psychology), as well as religious science. In total, there must be at least a hundred refereed journals dedicated to one higher thing or another. *Leisure Studies* (http://www.tandf.co.uk/journals/titles/02614367.asp) and *Journal of Parapsychology* (http://www.rhine.org/f_jour.htm) are a couple of examples.

A Synthesis

The previous discussion has presented a basic delineation of lower and higher things in life. Table 2 shows a tentative summary comparison of them, characterized as pairs of ideal types. Take survival versus meaning, for example. Survival belongs to the lower issues because it concerns such an elementary question as whether a person is dead or alive. While a lot of people around the world are still fighting for their very existence, many others have moved past this predicament a long time ago, and are now seeking a purpose in their life. Meaning in this sense is obviously a higher issue. Because lower and higher things are not homogeneous realms, not all of the features apply to all phenomena in the class. "Achieving," for instance, does not describe all higher

things. The real life examples in the chart were retrieved from the World Wide Web (WWW) with the Google search engine (http://www.google.com).

On the one hand, Table 2 shows how very *different* the two contexts are. There are grounds for asserting that higher things "are 'deeper,' more natural, and more intrinsically human" than lower things (see Maslow, 1968, p. 194). In general, higher matters are wanted by people, whereas lower matters have to be dealt with lest the actor's life would become a muddle. In the final analysis, it is because of an ordinal or hierarchical relationship that we chose the terms "higher things" and "lower things" (see Olson, 2002): the former are clearly more attractive, nonmaterial, profound, rewarding or higher up on the human being's need hierarchy than the latter. This is, however, an approach that seeks to polarize (cf. Linley, Joseph, Harrington, & Wood, 2006) and separate the two spheres, and therefore it can be called *atomistic*.

On the other hand, one can discern that the two areas (higher and lower) are in fact diagonal opposites, and hence they *complement* each other. Their relationship can also be described as intertwined (alternation) and even symbiotic (nourishing each other; cf. Seligman & Csikszentmihalyi, 2000). It is nearly impossible to think about one side of life without the other. This is fittingly captured in phrases like "there is no art without pain" and "there is no growth

TABLE 2. Distinguishing features of lower versus higher things in life.

LOWER THINGS		HIGHER THINGS	
Feature	Example	Feature	Example
Anxiety	"Anxiety is the unpleasurable affect, usually accompanied by physiological sensation, that is characterized by worry, doubt and painful awareness that one is powerless to control situations" (http://www.levymd.com/html/anxiety_disorders.htm)	Anticipation	"one might see a particularly mouth-watering dessert and look forward to sampling it with pleasurable anticipation" (http://www.garlikov.com/philosophy/itches.htm)
Externally motivated	"Externally motivated speaking: When a speaker uses this type of language she is implying that she is obligated to someone else. When students use this language it is easier for them to fall in to the role of a victim. Life happens to them. They react to circumstances." (http://www.phirhopi.org/prp/spkrpts3.1/goal.html)	Internally motivated	"Internally motivated athletes train because it is fun and it makes them happy. The drive is the joy of the sport and the mastering of skills [...]. They come to practice because they like to train, not because they have to win every drill and exercise." (http://www.xcskiworld.com/training/Racing_Advanced/motivation.htm)
Mundane	"Thus, the poor task—cleaning the leaves out of the rain gutters in autumn, to cite one mundane example—keeps getting bumped down the list, below other, more pressing jobs. You've got to go grocery shopping first, because you won't have anything to eat if you don't. You've got to mow the lawn first, because it will look awful if you don't." (http://www.businesstown.com/time/time-5reasons.asp)	Profound	"'While we were still sinners, Christ died for us.' This, indeed, is love profound." (http://www.gbgmumc.org/unionchapel-oh/sermons/Mar28_02.html)
Negative	"US-led NATO savagely bombarded the Chinese Embassy in Yugoslavia, killed our compatriots and damaged our dignity. These are based on conclusive evidence, the situation is serious. They are really cruel and bad!" (http://english.people.com.cn/english/199905/19/enc_990519001037_TopNews.html)	Positive	"Teletubbies are also extremely good role models for our children. They are sociable, enthusiastic, energetic, active, kind and loving to name but a few and surely these are the positive attitudes we to want to portray to our own children." (http://www.ukparents.co.uk/archives/teletotties.shtml)

(Continued)

TABLE 2. *(Continued)*

LOWER THINGS		HIGHER THINGS	
Feature	Example	Feature	Example
Ordinary	"And I made a documentary about the poor lives of the people. The officials hated my film because it was about life under Communism, showing how it really was. But it was the truth–I captured the ordinary lives of these people and their problems. I did it many times." (http://www.sensesofcinema.com/contents/02/22/meszaros.html)	Extraordinary	"Albert Einstein's extraordinary intelligence created enormous difficulty conforming to rules, staying focused and following directions." (http://www.unlimitedinspiration.com/articles-kids-adults.html)
Performing	"As the demand for performing pH [acidity] measurements increases, more methods are becoming available. pH probes, sensors that measure pH levels, are a popular means of making these measurements." (http://zone.ni.com/devzone/conceptd.nsf/webmain/D6AE2C6E8A52C46586256DBF0074A5ED)	Achieving	"You've got to believe deep inside yourself that you are destined to do great things." (http://www.livinglifefully.com/self.html)
Problems	"A serious problem exists in the rural villages of Malnesia of children dying from common illness and infections that are attributable to poor nutrition." (http://www.learnerassociates.net/proposal/exam3.htm)	Projects	"Public Adventures is a new citizenship curriculum designed to help youth contribute to the world around them and develop a life-long commitment to active citizenship. [...] The heart of Public Adventures is the project that the youth plan that creates, changes, or improves something that is valuable to many people. Then they do it!" (http://web.extension.uiuc.edu/dupage/4HSE/Program224.html)
Rational	"Here are some examples of rational functions: $g(x) = (x^2 + 1) / (x - 1)$ $h(x) = (2x + 1) / (x + 3)$" (http://www.analyzemath.com/rational/rational1.html)	Intuitive	"My intuitive mind, embracing the larger picture, gave me the blue shirt image way in advance of my attending this event. [...] Though I didn't understand what the image meant, I felt very comfortable in my body and trusted that I was given a significant key. I also trusted that my intuitive mind could accurately foreshadow a successful outcome just by my connecting with the blue shirt. [...] Finally, I had a heart connection with another person and knew that the wisdom coming to us from a higher source would be in the best interest of all concerned." (http://www.creativespirit.net/henryreed/Emery.htm)
Routine	"To perform a functional simulation in the ModelTech Modelsim software, you can create a script that performs the following steps: 1. Compiles the altera_mf.vhd, 220model.vhd, 220pack.vhd libraries. [...]" (http://www.altera.com/support/software/nativelink/synthesis/synplicity/eda_ex_synplty_func_sim_vhdl.html)	Special	"Zoot suits were reserved for special occasions–a dance or a birthday party." (http://www.pbs.org/wgbh/amex/zoot/eng_sfeature/sf_zoot_mx.html)
Survival	"The obvious question is, what should you have in your survival kit? This is a question that must be considered carefully since you may be betting your life and possibly the lives of your companions on it during an emergency situation." (http://www.survival-center.com/dl-list/dl29-kap.htm)	Meaning	"Frankl's experiences will take one on a journey that is never ending, the ultimate quest to find that ever-elusive meaning of life, or what one thinks life is." (http://www.exampleessays.com/viewpaper/59276.html)
Uninteresting	"assembly line workers face uninteresting and repetitive tasks daily with little or no chance of varying their tasks" (http://aabss.org/journal2000/f12tan.JMM.html)	Interesting	"Learning can be fun if you follow your interests." (http://www.interesting.com/)
Unpleasant	"If you do notice a smell in your vehicle, act quickly, otherwise the unpleasant aroma may be harder to remove. After all, who wants to have a foul odor ruining their driving experience?" (http://www.cartrackers.com/Buyers_Guide/Consumer_Advice/Car_Care/PID.5451.27225512101.1.html)	Pleasant	"All of us have memories of being somewhere and feeling carefree, calm and happy. Imagining such a relaxed or pleasant moment in your life can arouse calm or happy feelings." (http://mentalhelp.net/psyhelp/chap12/chap12d.htm)

without suffering." In the absence of lower things, life would be a heavenly utopia of bliss and perfection. In the absence of higher things, life would be a hellish dystopia of torment and drudgery. The human life normally includes both sides, although in varying degrees. Contrary to the previous paragraph, here is an approach that aims at joining and integrating the two spheres, and hence it may be named *holistic*. In this light, our usage of the terms "higher" and "lower" is by no means a value judgment (cf. Olson, 2002): The simple matter is that it was necessary to divide the whole of human life into two reciprocal layers, and there was no pair of words that would better convey the meaning of the theoretical bisection.

The distinction between lower and higher things in life is conceptually clear-cut, but it may seem vague in borderline cases. For instance, to which category does sex belong? There are undoubtedly individuals who believe that sexuality is a base instinct. Others (including us) would say that sex is a higher thing, because it is usually judged a very enjoyable activity. What about (alleged) demons and satanic cults? They are phenomena with a very negative air about them, of course, but they do involve the supernatural, and hence they could be treated as higher things, at least at the theoretical level. The lesson from this is that higher things are not always positive or morally acceptable, as deemed by the majority of people. On the other hand, not all positive things are higher. Being able to utilize a tool, for example, may be beneficial, but it would not be deemed a higher thing. Therefore, higher should not be *equated* with "positive," or "lower" with "negative." Further, what does one do with spiritual orientations that talk of the dialectical tension between the lower and the higher as constitutive of each other? Spirituality in most cases refers to spirit, which clearly belongs to the things regarded as higher. If there are forms of spirituality that totally equalize the lower and higher areas, then those forms should be called "holistic" (see previous paragraph).

As a supplementary thought, there are certainly occasions when a lower process contains some higher elements (or vice versa), and when a higher thing becomes so negative or uninteresting that it starts to feel like a lower thing (or vice versa). A keen reader must have noticed that everyday life and problem solving, for instance, are identified only with lower things. Why are they not equally appropriate to higher things? One might argue that for a professional musician, after all, music is "everyday life." Similarly, it is conceivable that each of the higher things enumerated in Table 1 are also contexts in which problems need to be solved. These observations are quite correct in that everydayness and problems are a part of the higher realm. However, everyday life and problem solving are by definition lower things, and they are not characteristic of higher things. It is naturally possible for a researcher to focus on a lower aspect of a higher thing, but then it becomes likely that the study is in fact set in the lower context. Consider the above-mentioned musician, for example: Music in itself is a higher thing, but when it is viewed as daily work, it effectively changes into a lower thing.

These considerations imply that the boundary between lower and higher things in life is not absolute, but subject to interpretation (cf. Archer, 2000) and subtleties. This is why it is so important to explicate whether the context in one's study is *primarily* a lower or higher thing. Whatever the specific context is, we hypothesize that its essence—i.e., its nature of being lower or higher—is a cardinal factor in determining information activities, for example.

Higher Things in Information Science

Earlier Research

The informational facets of higher things in life have been largely ignored even in the field of information research itself. It ought to be obvious by now that higher things offer a necessary but unheard-of perspective to the discipline. It must be admitted, though, that the higher side has been foreshadowed in earlier literature. The typologies of concern versus interest (Wilson, 1977), external vs. internal motives (Hersberger, 2002/2003; Kari, 2001), and reason versus "emotion/imagination/poesy" (Olson, 2002, p. 27) all suggest an underlying division between the lower and the higher.

A theoretical article by Bates (2002) on information seeking talks about various "layers of understanding" that should all be examined in research. The seven levels (from bottom to top) in her model are as follows:

1. Chemical, Physical, Geological, Astronomical;
2. Biological (genetics and ethology);
3. Anthropological (physical and cultural)
4. Social and Historical (social sciences);
5. Cognitive[sic!]/Conative/Affective (psychology);
6. Aesthetic (arts and literature); and
7. Spiritual (religion, philosophy, quest for meaning). (Bates, 2002, p. 2.)

Bates mentions "upper" and "lower" layers too, so here is a clear point of comparison with higher and lower things. Unfortunately, she does not specify which strata are upper and which ones are lower. We would place the (analytical) boundary within the fifth layer, with "affective" belonging to the upper levels (see Table 1), and "cognitive/conative" belonging to the lower levels. This is because emotions go beyond mundane reasoning; one might say that they are "irrational."

It is unfortunate that information scholars have not followed up those antecedents. There have been sporadic studies and even whole journals—namely *International Review of Information Ethics* (http://www.i-r-i-e.net/) and *Journal of Religious & Theological Information* (http://www.haworthpressinc.com/web/JRTI/)—looking at specific higher things, but they are just individual cases without a common frame of reference. Our attention now turns to these pieces of research: What have they found out? A formal review of all information studies in the context of higher things in life is not the purpose of the article. Instead, this section describes and discusses an exemplary collection of investigations whose number and variety should be sufficient to convince

any reader that higher things in life is by no means a trifling sphere. The array of the specimens is organized by their primary higher type, i.e., pleasurable or profound.

The pleasurable. Art as an element in designing information systems is handled by Faro and Giordano (2000), who contend that human communication is enriched by music and graphics. Their article is derived from observing the evolution of a number of system designs by students. Modern art influences contributed to making basic art techniques more able to convey design concepts and explain design motives. To express motifs through painting, for example, the novices especially resorted to techniques from "abstract expressionism, pop experience and multimedia advertising and entertainment" (p. 518). Faro and Giordano conclude that the aesthetical dimension—which is ordinarily neglected by the information engineering community—tacitly becomes a conduit for pursuing quality and novelty. Aesthetics seem to be a kind of catalyst for designing information systems more creatively and participatorily.

There have been many studies on indexing and retrieving *fiction,* especially in connection with public libraries (see Saarti, 1999; Cawkell, 1997). Nielsen (1997) aptly brought forward the peculiarities of classifying and indexing fiction. Factual information is quite dissimilar to fiction, and this has to be taken into account in intermediaries' document analysis. As a former literary scholar, Nielsen points out the fact that invented stories can be read in several different but equally valuable ways. These readings may deal with the denotative or connotative level of the imaginative texts. The tangle of possible interpretations leaves a classifier with two alternatives: to either abandon subject access to fiction altogether or select the most qualified readings as the basis for description. According to Nielsen, other important aspects that should be acknowledged in indexing a work of fiction are its narrative structure, aesthetic nature, and literary context. Needless to say, all these features of fiction complicate the indexer's work.

In Usherwood's and Toyne's (2002) study, the participants (30 groups) viewed reading *imaginative* literature "as a special activity which serves to satisfy a wide variety of needs" (p. 40). The readers' identity was not permanent but changed with time. One of the most essential contributions of reading was personal development. Other, significant benefits of fiction were relaxation, means of escape, instruction, improving on literacy skills, learning lessons about the world, and gaining insights into the "other." Warner's (2003) eccentric but inventive article juxtaposed the Greek *legend* of Theseus (an ancient, mythical hero), and the modern information theory by Shannon and Weaver. He took "the central episode of Theseus's encounter with the Minotaur in Crete," in which "a binary code was arranged to signal Theseus's success or failure on return from Crete to Athens," and mapped its components to those of the theory. Despite the unlikely combination, a "high degree of correspondence between the two independent formulations" was detected (pp. 541–542).

Chen, Wigand, and Nilan (2000) surveyed the *flow* experiences of 304 WWW users. Probably leaning on Csikszentmihalyi's flow theory, the article defines flow "as an optimal, extremely enjoyable experience when an individual engages in an activity with total involvement, concentration and enjoyment, and experiences an intrinsic interest and the sense of time distortion during his/her engagement" (p. 263). The most frequent activity that induced the flow condition was Web searching or surfing. The second most notable triggers were reading (e.g., articles in the WWW) and writing (e.g., E-mail messages). Chatting over the Internet was the third most reported cause. The researchers identified several flow "symptoms" that arose when using the Web: "merging of action and awareness," intense "concentration on the task at hand," "a loss of self-consciousness," a "sense of time distortion," "a sense of [being in] control," telepresence (the feeling "of being present in a mediated virtual environment"), and enjoyment (pp. 270–275). In conclusion, Chen and the others enunciate that WWW-based flow experiences should improve the users' psychological well-being.

Reading is a significant activity in people's *leisure* hours (Barstow, 2003), but it is by no means the only informational pastime. Saulauskas (2000) states that for heavy Internet users, Internet sites (chat rooms, newsgroups, portals) are the most likely recreation place. Pivec (1998, pp. 90–91) discovered in an empirical study that Internet use was regarded as "a sign of progress" by most of his juvenile informants. All of them dedicated their spare time to the Internet, principally because the network was an "asylum" for them. Almost every second person saw Internet surfing as a means of finding friends. It is not surprising, then, that using IRC (Inter Relay Chat) services was exceptionally popular. When searching the Internet, the teenagers were more after entertainment than (f)actual information. Television and the Internet were the two major media that competed for their interest. About half of the respondents stated that their Internet use had reduced the watching of TV.

In a feature issue of the Journal of the American Society for Information Science and Technology, Downie (2004) introduced the area of *music* information retrieval (MIR). He states:

> Music information is a multifaceted amalgam that includes pitch, temporal (i.e., rhythm), harmonic, textual (i.e., lyrics, etc.), timbral (e.g., orchestration), editorial, and metadata elements. Music information is also extremely plastic. That is, any given work can have its specific pitches altered, its rhythms modified, its harmonies reset, its orchestration changed, its performances reinterpreted, and its performers arbitrarily chosen; yet, somehow, it remains the "same" piece of music as the "original". (p. 1033)

In consequence, creating and interpreting music information queries is likewise extremely plastic. MIR interfaces basically come in two varieties: one accepts "symbolic representations (i.e., written or performed notes and/or metadata)" and the other "audio representations (i.e., Query-By-Humming,

Query-By-Example, etc.)" as query input. In the extraordinarily fluid setting of music information retrieval, measuring "similarity" (between documents and the searcher's needs) becomes particularly problematic (Downie, 2004, p. 1033).

In an experimental research project, Sever and Pearl (1990) observed how a number of school classes (one at a time, excluding teachers) behaved in an artificial children's library with some 8,500 books. The pupils were not given any assignments; instead, they were free to do what they wanted. They apparently took pleasure in solitary reading. More conspicuously, however, the children's interaction with books and each other closely resembled *playing* in many respects: "sharing, participating in group activities, showing, offering partnership and either accepting or refusing it seemed to show that children conceived of reading for fun as 'play'" (p. 333). In Sever and Pearl's mind, playfulness is something of a prerequisite for reading to be fun. They point out that there is an element of play in libraries, too, so the phenomenon is by no means confined to laboratory (or home) environments:

> Children's libraries, whether school libraries or children's departments in a public library provide space and time for both "serious study" and circulation of books for "fun." … libraries offer their young patrons puppets and their theaters, games, storytelling and other activities more associated with playgrounds in nursery schools. (Sever & Pearl, 1990, p. 328)

Indeed, Sever and Pearl (1990) make a theoretical distinction between *pleasure* reading, which feels "fun," and serious reading, which feels rather like "work": "Reading for pleasure is … something a [person] does voluntarily, in his own time, and the selection of the material rests on the [individual], without imposition" of outside norms (p. 328). Ross interviewed 194 avid readers about reading for pleasure. Not surprisingly, they selected books for the enjoyment expected from reading them. She found that the respondents typically searched for books by constantly monitoring their environment for clues. When choosing literature, the readers emphasized the role of personal trust not only in others' opinions but also the author's "voice." One's affect was perceived as an essential part of interacting with the texts (Ross, 1999). The informants did not normally see themselves as being engaged in information seeking. Yet when reading narrative books, they accidentally came across material that proved helpful in their own life (Ross, 2000).

Spink, Ozmutlu and Lorence (2004) perused about 58,000 WWW search engine queries concerning *sex*. The results contained some significant deviations in contrast with non-sexual search requests. The search terms namely comprised a narrower vocabulary than normally. On the other hand, the number of queries submitted and pages viewed was larger, and the search sessions lasted longer than usually. In an earlier piece of research—analyzing a sample of some 2,400 Web queries across all subject areas—the results showed that recreation and sex were the two most common search topic categories among the public (Spink, Wolfram, Jansen, & Saracevic, 2001).

The profound. In a scientometrical study by Dewett and Denisi (2004), the perceived *creativity* of 168 management scholars was contrasted with their academic reputation. The chief finding was that creative contributions were a stronger predictor of reputation than the sheer quantity of published research. About two decades previously, Bawden (1986) wrote about the implications of scientific creativity for information provision. He identified four sorts of information that are particularly helpful in a creative process: interdisciplinary information, peripheral information, speculative information, as well as exceptions and inconsistencies. The discussion also gave rise to some information strategies that would aid creativity: finding analogies, favoring chance, stimulating ideas at random, and suspending evaluation temporarily.

Ethics in the field of library acquisitions has been discussed in many articles, one of which is by Flowers (2002). If a vendor has trouble delivering products, the right thing to do is to keep libraries informed about this, rather than try to hide such difficulties. On the other hand, it is also ethical for libraries to give the problematic vendor or publisher an opportunity to explain their bad service before going public with the issue. Another ponderer of ethical questions is O'Toole (2004) who has considered them in the context of archives. When archivists manage information, their practical activities have moral implications. Publicized examples from the religious and political spheres suggested that preserving records is not always recognized as a good thing. In totalitarian states, for instance, archival information is used in interrogating and even killing suspects. Although archivists cannot be held directly responsible for the atrocities, they may still be viewed as accomplices because they maintain documents that facilitate such acts.

Kari (2001) interviewed 16 paranormalists about their information seeking in the domain of the *paranormal*. The most cardinal findings were as follows:

- The situation in which information searching took place could itself be perceived as involving supernatural phenomena.
- Information was mostly required about normal rather than paranormal matters.
- Some people consulted information sources that they regarded as paranormal.
- Information could seemingly be obtained via supernatural modes of communication.
- Paranormal information was felt helpful.
- Barriers to seeking paranormal information were relatively uncommon, but when they did arise, they were probably related to the individual.
- 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 seeking. It appears that the content—but not process—of information seeking in the context of the paranormal differs from normal information seeking in many important respects, although they have their similarities, as well.

After this, Kari (2006) set out to explore what Internet searching has to do with *personal development*. The project's (so far) most revealing article reports on a qualitative case study in which a single participant was interviewed and her Web searches observed. A grounded analysis indicated that the host of information search strategies seemed to form a spectrum of developmental sophistication, and that there were some informational phenomena that exhibited regression, the converse of development. Other, more specific findings of interest were as follows:

- Levels of individual development ranged from the microscopic (information about developing) to the macroscopic (the human being's inherent growth).
- Development took place as either quantitative reinforcement (increase in amount) or qualitative expansion (diversification).
- Passive growth and active development comprised another basic dimension of human development.
- Information searching could involve both regression and development at the same time.

A study by McAfee Hopkins (1989) explored the promotion of *positive* self-concepts in elementary school library media programs. The research design relied on observations, interviews, and diaries by which the data was extracted from students and library staff in three different library media centers. From the higher things point of view, the most interesting factor in the piece of research is "positive atmosphere." This was apparent in the physical settings as welcoming posters, signs like "Love Spoken Here," and so on. The library media specialists tried "to make each child feel special" via planned activities or by other means. The students, in turn, liked visiting their library media center, and they also voluntarily used it more than they were required to (p. 145).

Smiraglia's (2002) investigation on *theological* works (the intellectual content of a document) involved a sample of 469 bibliographic records from the theological collections of one university library and one seminary library. The works' mean age was over one hundred years, being thrice as old as the works in other, more general pieces of research. The years of origin demonstrate the temporal broadness of theological literature. Nearly all of the theological works in Smiraglia's study were instantiated in the form of monographs: narrative nonfiction, theses, lectures, sermons, reports, and handbooks. Smiraglia also discusses revelations as constituting a special genre of information and a major element in the literature of many faiths. Revelation means "the setting down of revealed truth" (p. 243; from e.g., alleged spiritual beings), so it should not be equated with composed text. Grounded analysis suggested that the cultural roles of revelations and scriptures (sacred writings) are complex.

Harmon and Ballesteros (1997) report intriguing findings from their innovative, experimental study of *unconscious* information needs with 36 students and faculty members:

> As a result of the elicitation of unconscious cognition, the experimental group showed marked increases in intuition, insight, ideas, affect, and conceptual fluidity. The mobilization

of unconscious cognition also had a positive impact on the formulation and representation of research problems for the inquirer and the intermediary. (p. 422)

In Bates' (1999) view, library work is driven by a *value* system that is usually oriented towards service and empowerment. This notion finds some corroboration from Aabø and Strand's (2004) study in which 999 Norwegians were randomly surveyed. The respondents were asked about their "public library valuation." According to the results, global altruism formed a significant 15–30% of the total value of libraries. Global altruism in this case translates into appreciating the library's positive role in (unselfishly) promoting people's welfare. Generally speaking, it is plausible to suggest that values affect individuals' information processes (see Bouthillier, 2002/2003). Information research, on the other hand, has followed the scientific model, which entails the tendency to eradicate value-laden goals (Bates, 1999). This should not be taken to mean that the role of values is not to be studied by information scholars.

Volunteering has been yet another rare context in information science. One specimen is supplied by Gibbs' and Linley's (2000) project entitled "Education and training for information work in the voluntary sector" (p. 155). They surveyed 181 organizations and interviewed 20 course providers and information workers. An important trend was observed: The boundaries between different occupations have blurred. Many volunteers increasingly managed information, to the extent that it does not any longer make sense to talk about "information specialists," let alone "librarians" in the sector. This development was, it seems, ignored by most departments of information and library studies. A "growing need for the education and training of a wide range of information workers in the voluntary sector" (p. 166) was enounced, but this call had been only partly answered, and even then by organizations outside information science. In consequence, the vocational instruction remained "a bit of a mess," which did not bode well for the most disadvantaged individuals in society— those who the voluntary sector largely aids. We take it that this prognosis refers to information poverty due to low-quality information services.

Implications

In summary, there is in all likelihood nothing inherently higher or lower about information as such. Rather, its "height" is determined by its content, source, channel, and context. For the sake of illustration, let us imagine that a man disseminates the following information:

> **Home Alive** is a Seattle based anti-violence project that offers affordable self-defense classes, provides public education and awareness, and leads local community organizing efforts. We believe violence prevention is a community responsibility as well as an individual issue. Our work in self-defense encourages everyone to recognize their entitlement to the basic human right to live free from violence and

hate. Our goal is to build a cultural and social movement that puts violence in a context of political, economic and social oppression and frames safety as a human right. (http://www.homealive.org)

From an objective vantage point, the content itself—with its emphasis on violence and self-defense—is of the lower kind in the extract above. Suppose now that the individual has no personal interest in the information, and he only spreads the message because the task was assigned to him at work. This would make it a patent case of lower information from the man's angle. On the other hand, if the personage circulates the message of his own accord, as a part of his life mission, it would represent higher information to him. As we can see, here it is the context which determines the subjective elevatedness of the information.

Based on research so far, the most central implications of higher things for information studies are presented next. One of the most elementary lessons is that the information phenomena in higher contexts can be forced or lowered (see Dilman, 2000) into a traditional model. The result, however, is probably a reduced torso that has lost something essential to its original nature. As a case in point, the motivations behind searching for information are apparently much more heterogeneous than presumed by the rationalistic "school of problem solving" (Kari, 2001, p. 210). In Nahl's (1998, p. 1022) opinion, a "more authentic user-centered approach has a 'creative focus', reflecting how users are actually not predictable and consistent, with interests larger than the current performance itself." In some cases, information seeking may be just a reaction to external circumstances, but in other cases, it may be a means of realizing one's internal hopes. Then again, information resources are also used for pastime or enjoyment, for instance, rather than for utilitarian purposes.

People's information needs, too, seem to be more versatile than what has been generally professed in information science (Kari, 2001). We should start asking whether the prevailing negative notion of information need as a felt lack of knowledge is universally valid. It would often be more appropriate and helpful to see information need in a positive light, as a want to strengthen and develop one's knowledge (see Wilson, 1997; Wilson & Walsh, 1995). Table 3 demonstrates how positive thinking may contribute to conceptualizing needs for information. Or, we could take heed of the insight that the quality and quantity of what an entity already knows are two measures of the developmental level that it has reached so far. These optimistic ideas of information needs and knowledge are exemplars in displaying how the higher viewpoint works when construing information phenomena. In the future, one might also look into what sort of factors actually promote information processes, instead of hindering them (Kari, 2001; see also Dervin, 2005).

It is almost certain that higher things interact with people's information needs and seeking. When powered by a genuine desire, information seeking may be more persistent (Hersberger, 2002/2003; Spink *et al.,* 2004) or continual, for instance. Nicholson (2002, p. 259) says that information and

knowledge are "the key to a better life," but exactly how this comes about is not known very well. From the angle of the users' immediate well-being at least, how to facilitate flow experiences with information and information systems would be a sensible object of research and development.

Higher things in life involve some information forms that do not exist in connection with lower things. They enrich the field of information science, but they also give rise to dilemmas in indexing and retrieving documents, for instance. Then again, higher things can be a significant factor in assessing the value of any information source or channel. Instead of their information content, representations can be appreciated as an aesthetic or narrative experience (see Nielsen, 1997). This means, for instance, that artistic elements may facilitate the usage of information artifacts, which ought to be taken into account when designing information resources. On the other hand, higher things are frequently so inspiring that they may tend to result in more creative planning of information systems and documents. Creativity, in turn, appears to have a favorable effect on an author's reputation.

Information as a denotative construct has been a tacit, axiomatic assumption in information science, whereas the manifestation and function of connotations has been neglected. Also, information research has focused on cognitive and physical processes, downplaying the role of emotions in informational activities (Julien, 1999; see also Ross, 1999). For instance, whether the atmosphere in an information center feels positive can make a big difference as to how people perform there or if they visit the place at all. Ethics as well should play a greater part in the discipline than previously to increase moral awareness in the world. Information, information services (see Mitchell, 1988), and particularly the outcomes of information are not neutral phenomena; they often entail questions of what is right or good and what is wrong or downright evil.

It is probably true that scholars' conception of the endpoint of human growth has an impact on the direction of (information) research (Alexander, Druker, & Langer, 1990), even if this happens subconsciously. The endpoint may refer to the age at which significant development is seen to cease, or to what kinds of abilities are possible for man to achieve, for instance. Looking to promote cutting-edge research, we note that exploring the (e.g., perceptual and cognitive) potentiality of the human being for obtaining, processing, and sharing information has been forgotten in information studies (Kari, 2001). From intermediaries' perspective, for example, it is just as important to help information seekers extract information from their own unconscious as to refer them to external sources (Harmon & Ballesteros, 1997). As a final reflection, information scientists take information phenomena very seriously—even too seriously, some might say. Where is all the fun and playfulness that is part and parcel of living with information?

We find it interesting that almost every study reviewed for this section (Higher Things in Information Science) exposed one or more findings that ran counter or added something to the established information science knowledge, which generally

TABLE 3. Implications of positivity for information needs.

Negative notion	Positive notion	Implication
Anomaly or "anomalous state of knowledge" (e.g. Allen, 1996; Belkin *et al.*, 1982)	*Normality* or normal state of knowledge	Information needs may be viewed as anomalies from the angle of knowledge, but is constantly having them not a normal part of the human condition?
Anxiety (Kuhlthau, 1993b)	*Excitement*	Some information needs are characterized by concern, and others by interest (cf. Wilson, 1977).
Apprehension (Kuhlthau, 1993a)	*Anticipation* (cf. e.g. Bruce, 2005)	Instead of painful expectation, a need for information may engender pleasurable expectation.
Gap (e.g. Dervin, 1999*; Savolainen, 2000)	*Bridge* (see e.g. Kari, 2001)	Our knowledge is quite gappy, but only those gaps which we deem worthy of bridging should be called 'information needs.'
Inadequacy (Belkin *et al.*, 1982)	*Adequacy*	The pessimistic viewpoint may focus on how unsatisfactory one's knowledge is, while the optimistic viewpoint would respectively point out that it is often possible to make decisions on the basis of one's current knowledge – even when it is defective.
Information *poverty* (e.g. Chatman, 2000)	Information *asceticism*	Living with little information may take place by force of circumstances, or through a chosen life style of simplicity.
Information *problem* (Prakken, 2004)	Information *change* (see Kari, 2001)	Nowhere near all information needs are problem-centered; many are motivated by a wish to develop one's knowledge.
Knowledge *failure* (Allen, 1996)	Knowledge *success*	It is natural that one's knowledge fails from time to time, but it is fruitful to look at how one makes it succeed.
Lack of knowledge or information (e.g. Kuhlthau, 1993a)	*Want* for knowledge or information (Line, 1974)	When the lower perspective stresses what information one lacks, the higher perspective stresses what information one really wants.
Requirement (e.g. Belkin *et al.*, 1982; Urquhart, 2001)	*Choice* (Booth, 2005)	Sometimes information is compulsory, and sometimes one can freely determine whether to acquire information or not.
Stress (Wilson, 1997)	*Relaxedness* (see Harmon & Ballesteros, 1997)	Stress is frequently a symptom of information needs, but it may be easier to formulate one's needs when feeling relaxed.
Uncertainty (e.g. Kuhlthau, 1993a; Wilson, 1999)	*Certainty* (cf. Yoon & Nilan, 1999)	The typical notion is that information needs are triggered by uncertainty, but it ought to be realized that absolute certainty may be almost impossible to attain.
Uncompleted "relation structure" (Farradane, 1980, p. 79)	*Completing* relation structure	When one analyses how a knowledge structure of his/hers is incomplete, does one not analyze how to complete it, too?

*See the reservation presented in the Lower things section.

pertains to lower things. Investigations in the context of higher things have indicated that beyond the spotlight of mainstream research, informational activities often seem different, and that there may be significant dimensions of information phenomena which have been overlooked (see Linley et al., 2006). Hence, there is clearly a need for a more concerted effort in this area that is apparently teeming with "anomalies."

A Contextual Research Front

Context and Information Phenomena

The first conundrum in tackling higher things in life is a theoretical one. Should we conceptualize them as a perspective, phenomenon, category, context, domain, or what? At least in information studies, it would be apt to treat higher things as a cluster of contexts or a fundamental context of information phenomena. The discipline of information

science has traditionally examined particular kinds of information and information behavior as *embedded* in miscellaneous contexts (Figure 1). For instance, information seeking has been studied in the contexts of economic factors (e.g., Hersberger, 2002/2003) and disease (e.g., Wikgren, 2001). This approach is good at establishing those properties of information processes that hold true in many contexts: The higher the number of contexts in which an information pattern is observed, the more generalizable the pattern becomes. The weakness of this mode, on the other hand, tends to be the contextual insensitivity: What particular context the researcher selects is not really significant, because his or her major interest focuses on the information phenomenon.

There exists another, equally legitimate perspective, however: to look at certain contexts (like higher things) as *containing* sundry types of information structures and processes (see Figure 2). Here, the unit of analysis switches from an information phenomenon to a context. Such an integrative approach cuts across any or all issues of interest to
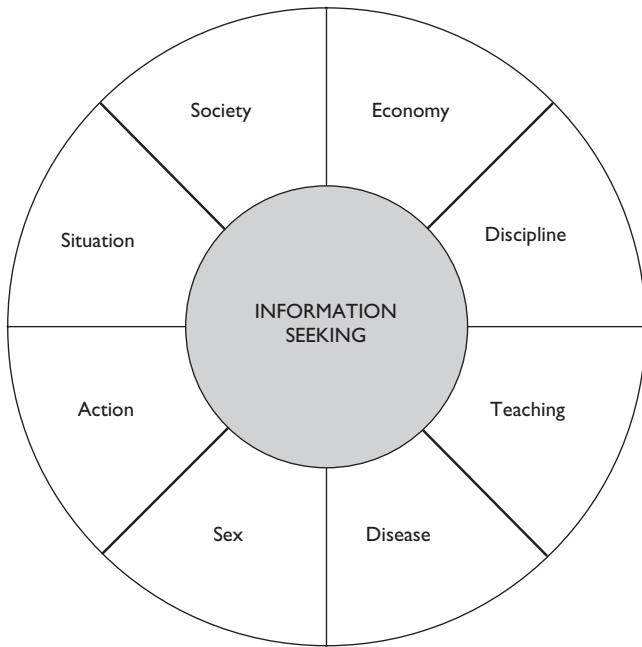
FIG. 1.   An example of the traditional research model: information behavior in various contexts.
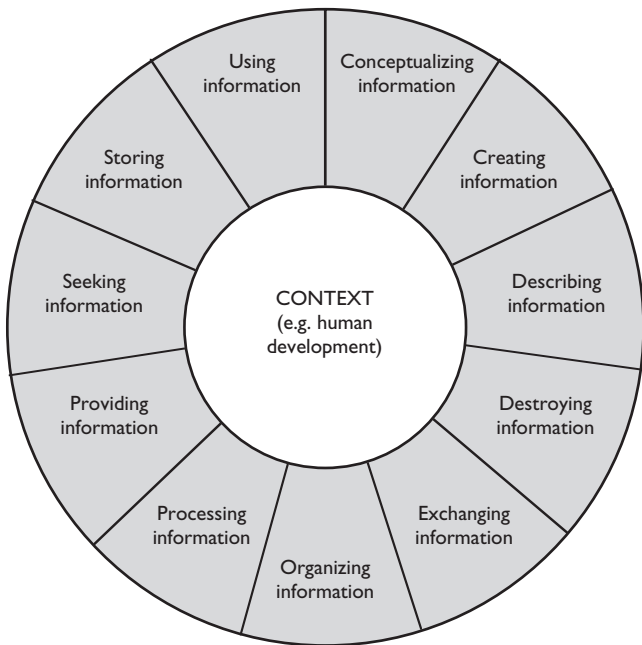

FIG. 2.   An alternative research model: a context with various information processes.

information research, exchanging phenomenal narrowness for contextual narrowness. The main strength of this model is its facilitation of finding contextual connections between various information forms and processes, and ultimately of reconstructing the whole information world of the context. A major downside is that the research results cannot be easily generalized to other contexts.

Figure 2 also shows how a context can incorporate a variety of information processes. *Information process*—a central

phenomenon in information research—is defined here as a changing condition in which an entity (e.g., individual or group) performs a series of mental or physical deeds in relation to external information or internal knowledge, usually in order to achieve something (see Kari & Savolainen, 2003). Three different but complementary perspectives on information processes can be detected: information action (situational & subjective; e.g., Kari & Savolainen, 2003), information behavior (objective; e.g., Kari & Savolainen, 2003), and information practice (customary; cf. McKenzie, 2003; Palmer, 1999b). Irrespective of the angle, information processes may take at least eleven concrete avenues: conceptualizing, creating, describing, destroying, exchanging, organizing, processing, providing, seeking, storing, and using information (Figure 2; cf. Algon, 1997; Chaminda, 2004; Kari & Savolainen, 2003).

That classification emphasizes "information-as-process" instead of "information-as-thing" (see e.g., Buckland, 1991). Like information processes, information forms or objects are naturally contextual phenomena, too. Whether one chooses information processes or information things here is not the issue; the point is to draw attention to the two basic relationships between context and information phenomena (information-centric vs. context-centric). The emphasis on context puts a stop to otherwise unsolvable problems such as "what is information" or "what is valuable information." We do not think these are useful questions, but instead we prefer to ask what the nature and role of information are in a certain context. Selecting a context for analysis is certainly not random: one should choose a context that is personally, socially, and scientifically rewarding.

The question remains: What type of context do the higher things in life constitute? At least, they may be conceptualized in terms of activity contents, domains, elements of life, environmental factors, experiences, levels of existence (Bates, 2002), mental models, personal traits, situations, states of consciousness, subcultures, subject areas, or ways of life. Some of these apply better to some higher things than others: For example, there is hardly a subculture of relaxation, but there is a subculture of paranormalists. All higher things can also be approached as either inside (subjective or personal) or outside (objective or social) phenomena from the individual's point of view, like Case (2002) does with context in general.

A Research Front

In order to put an end to "dabbling" (see Dervin, 1997) and ensure continuity in scientific growth (Lakatos, 1970) concerning information phenomena in the higher context(s), we propose that the research field elaborated above is taken seriously in information studies. Based on the alternative, context-centric model of inquiry (Figure 2), scholars' mission in this sector would be to explore and explain the informational features of pleasurable and profound areas in human life. There is a definite need for considering higher things in life in their own right, instead of downgrading them to just another empirical setting.

The research front is a collective project whose major objectives should be to

- establish what informational phenomena are similar across all higher things, and what are different with different types of higher things (e.g., pleasurable vs. profound realms)
- systematically tease out the similarities and differences between higher and lower contexts as regards information phenomena
- identify the novel discoveries and innovations made in the higher field, and reconnoiter their wider usability in information science and society.

Within the research area, it is possible to examine virtually any types of information phenomena and their interplay with either the whole context of higher things in life or a specific subcontext thereof (cf. Hjørland, 2002b). Numerous projects could happen even within each subcontext. Below are some promising, broad research perspectives, for example (these partially originate with Broughton, 1978, p. 78; Hjørland, 2004; Seligman & Csikszentmihalyi, 2000):

- content / process
- formal / informal
- habitual / situational
- information / knowledge
- past / present / future
- personal / social
- realism / antirealism
- self / world
- subjective / objective
- truth / falsehood.

The general orientation of research can be descriptive or prescriptive. A *descriptive* inquiry neutrally delineates given phenomena and their interrelationships, whereas *prescriptive* (also called intervention) work additionally weighs the alternatives and recommends certain courses of action (Seligman & Csikszentmihalyi, 2000). The current article, for example, is itself prescriptive, for not only does it describe higher things in life, but it also elucidates why and how they should be incorporated into information research. Here is a sample list of possible research questions that could be pursued by scholars in order to do either descriptive or prescriptive studies:

- What information channels exist in a context, and how are information flows distributed among them? (see Hjørland & Albrechtsen, 1995)
- How do people's information processes relate to the context?
- How do their information networks relate to the context?
- Are there needs for special information services in the context? (see Hjørland, 2000)
- How do changes in the context influence information seeking? (cf. Hirschfeld & Gelman, 1994)
- How do and should information processes and information networks develop in the context?
- Do different contexts require different indexing principles? (see Hjørland, 2000).

Information phenomena in the context of higher things in life can normally be studied with the same methods as other phenomena in information research (see Seligman & Csikszentmihalyi, 2000). Because the proposed research front essentially represents uncharted territory in information science, however, qualitative methods should be emphasized at this point. A balanced mix of empirical, theoretical, methodological, and philosophical work is needed throughout the lifespan of the research area (cf. Dervin, 1997). Comparative studies juxtaposing information phenomena in higher versus lower contexts would also be welcome, for a single sphere can only reveal so much (Palmer, 1999a). It is advisable that they follow the traditional, information-centric research model (Figure 1).

Scholars are free to apply any metatheory or methodology that seems appropriate for the higher sphere. However, we think that some approaches—like discourse analysis (e.g., Olsson, 1999), domain analysis (e.g., Hjørland, 2002a; Hjørland, 2004), ethnography, network analysis, phenomenology, and Sense-Making (e.g. Dervin, 1999)—are particularly suitable. In some cases (such as sexuality or altered states of consciousness), the context may require resorting to more exotic research methods than what the information science community is used to. The special nature of higher things in fact invites methodological experimentation, providing a testing ground for empirical innovations. Still, one must realize that the most befitting research methods are determined by the subject area (Cairns, 1986) and research questions, and therefore specific or absolute guidelines cannot be given here.

On a larger scale, the research area can be seen as the informational piece in an interdisciplinary, if scattered research enterprise focusing on higher things in life. Since higher things are not the main territory of our branch of scholarship, information research thereof would do well to examine relevant theories, methodologies, and findings in other disciplines. This is a way of enriching the field of information science, but it also makes it more probable that the conducted research contributes to the growth of knowledge beyond the boundaries of the discipline as well.

Conclusion

This article has identified and defined higher things in life as a "new" research front in information studies, in the sense that it has not been recognized or systematized before. We recommend a "shift of emphasis" (Seligman & Csikszentmihalyi, 2000, p. 13; see also Lakatos, 1970; Linley et al., 2006) in our branch of science, so that its sphere of research would be brought to balance. By properly addressing the profound and pleasurable aspects of life, the prosaic problem solving paradigm in information studies could yet be complemented by its opposite paradigm which implies the prevention of problems. The current trend of analyzing how information helps in solving problems is therefore not enough. We should also be asking "how humanity can achieve what is best in life" (Seligman & Csikszentmihalyi, 2000, p. 13; see also Sheldon & King, 2001) by means of information. This sort of research would surely have plenty of practical

implications for information professionals and systems, and indeed for anyone who engages in information processes in connection with higher things. Such an approach would enable information scientists to help individuals, communities, and societies not only survive but also prosper (see Seligman & Csikszentmihalyi, 2000).

We maintain that theoretical concern with context, combined with empirical attention to higher things in life, are key factors in preserving and advancing information studies as a branch of humanities and social sciences. The research front laid out above is visioned as a fruitful and progressive endeavor, which may well introduce novel research methods—even methodologies and metatheories—to the worldwide community of information scientists. There are already many indications that scientific work in this new demesne can reveal things that would force us to extend our notions of information behavior and processes, information systems, and information itself. The sphere of higher things also appears to function as a kind of lens, providing an alternative point of view from which to conceptualize and interpret information phenomena in a positive manner (see Linley et al., 2006). In more concrete terms, advancing an explicitly "higher" approach in information studies would entail incorporating higher things in themselves into, say, models of information behavior, instead of using higher things as mere example contexts among others.

Pointing out the higher and lower contexts of information phenomena was the fundamental goal of this article. In the process, we have raised many questions and possibilities for future research in information studies. This is the best one can do at this stage of research. A much more sophisticated and validated statement would emerge after 20 years of systematic refinement and empirical studies related to higher things in life. In other words, the field, at the moment, is only beginning to figure out the significance of "higher" and "lower" things for information phenomena. This is why we also wish to start a scholarly and open-minded conversation with this article, inviting feedback from all scientists who have something to contribute to the research front. Those working in other branches of science are not excluded, for the basic distinction should be of interest to psychologists, social scientists, and humanities scholars as well.

We do see a tailored research program as the most effective solution to advancing organized research on information and higher things in life. In intellectual terms, the program could be founded on the research front as outlined in this article. The research would be supported by other activities, the purpose of which is to imbue the endeavor with coherence and collaboration. First, a dedicated Web site ought to be constructed to serve as a central information resource for interested scholars and the public. An E-mail list, seminars and workshops, special journal issues, as well as books are additional fora that should be considered. Moreover, it would be necessary to extend higher things in life to university curricula, because this is an effective way to spread the knowledge and enlist young information researchers.

The success of the research initiative hinges above all on the available resources, and therefore the allocation of funding for information science needs to be revised (see Seligman & Csikszentmihalyi, 2000). Moreover, there is every reason to suspect that educational institutions produce information professionals and researchers who are not adequately prepared to deal with higher things in life. This is likely a problem of global proportions, but it can be resolved by incorporating higher things into the curricula in information studies. The more research is done in the domain, the better teachers will be able to take higher things into account in their work.

One might still ask, "But why was the splitting of life into higher and lower contexts necessary in the first place?" The most obvious answer is: to reveal the imbalance in information science, and to enable researchers to address this imbalance. Without the polarity, higher things in life would still stay in the dark, or at least they could not be meaningfully related to those things that are not higher. Ultimately, as research advances, the dichotomy should be reconciled. This will not be accomplished by ignoring one side or the other or by erasing the entire polarity. Instead, the most useful solution would be to consciously integrate the lower and the higher, acknowledging the unique features and roles of information phenomena in each sphere (see Bates, 2002). This may be the only way to reach a complete comprehension of information processes (see Bates, 2002). By bringing all these ideas together, higher things in life offer a rare chance to promote holism and interdisciplinarity in information science and to make our discipline more relevant to the human being. One question now remains: Who is ready to rise to the challenge?

Acknowledgements

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