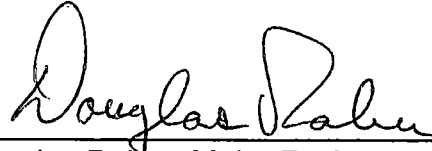


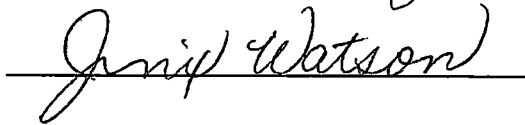
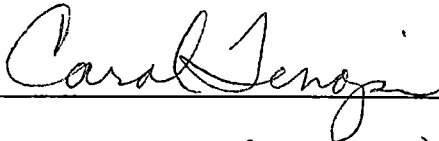
To the Graduate Council:

I am submitting herewith a thesis written by Valerie J. Frey entitled "Personal Information Systems: Journals and Diaries as Product and Process." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Information Sciences.



Douglas Raber, Major Professor

We have read this thesis
and recommend its acceptance:



Accepted for the Council:



Associate Vice Chancellor and
Dean of The Graduate School

**PERSONAL INFORMATION SYSTEMS:
JOURNALS AND DIARIES AS PRODUCT AND PROCESS**

A Thesis
Presented for the
Master of Science Degree
University of Tennessee, Knoxville

Valerie Janese Frey
May, 1999

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DEDICATION

This thesis is dedicated to the generations of my family.
They have given me a solid foundation and a bright future.

My Great-Grandmother, El Myra Trammell Reaves

My Grandparents, Robert A. Frey and Arlie Mae Reaves Frey

My Parents, Robert W. Frey and Sharon L. Cowles Frey

My Brother, Eric T. Frey, and his Wife, Jennifer L. O'Neal Frey

And

My Niece, Margaret Leigh Frey

(who kindly arrived during Christmas break
so I could be there and still get my thesis done)

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In addition, my thanks goes to Danielle Green, Heidi Thomas, Margaret Mellinger, Janet Wright, and Willene O'Neal for their support and friendship, as well as to the O'Neal, Jarboe, Clark, and Thomas families. Special thanks goes to my nieces and nephews, both "real" and "honorary," who never fail to provide fresh insight on life, comic relief, and love: Graham, Trevor, Erin, Emma, Colin, and Margaret.

ABSTRACT

In this study, literature from the discipline of Information Science was woven together first using literature on journals and diaries from the fields of Communications, Education, Literature, Psychology, and Philosophy, and then using field interviews with experienced diarists. The research explores the role of journals and diaries as personal information tools and personal information systems, providing examples of the varied forms, structures, and uses of these documents. Journals and diaries are involved in dual informational roles. First, as information products, these documents provide information storage and retrieval. Second, as information processing tools, these documents provide a means of sorting and organizing information. Journals and diaries are highly individualized and help the diarist resolve anomalies within their internal state of knowledge, allowing them to engage in cyclical processing of information to construct a more coherent and expansive knowledge base. The information recorded and processed in journals and diaries can be new or old, objective or subjective in nature, and cover the external or internal, the vocational or avocational.

PREFACE

A diary is a verification, proof that a person has lived and has cared enough about a life to describe it. Many have spent time on this planet, but few have made the effort to record their stay. The diarist is saying that at a particular time and place, a life has been lived and feelings have been felt and thoughts crossed a mind. The very act of recording has provided a unique attachment to surroundings and self, an opportunity to examine life. Just as Plato said, "The life which is unexamined is not worth living," one might ask, with the inveterate diarist, Emerson, "How can an unrecorded life BE examined?" (Cummings 1983, vii).

How Interest in the Topic Began

Academic research often begins with the personal. In my case, I can remember being eight years old and taking the remaining sum of several weekly allowances to the drug store where I bought a yellow spiral-bound notebook. As the years went by, this notebook came to be filled with original poems, not-so-original songs, crayon drawings, short stories, lists of favorite books, and brief essays on various topics. I remember that it was important to me not only to do these activities, but to preserve them and keep them together in a book that was all my own. In early middle school, the yellow notebook was replaced by another volume, this one blue and soon carrying the label "Diary." The entries in the blue notebook were similar to the first volume at the beginning, then slowly evolved into dated text entries containing descriptions of activities and random thoughts. By high school both volumes had vanished, presumably thrown out on a whim or accidentally discarded with outdated

school papers. At the time, I didn't consider the loss of this "kid stuff" to be very important, but simply continued writing in other notebooks.

The first two volumes of my diary, however, were not lost after all. Following the deaths of my parents, I began moving furniture out of my childhood bedroom and discovered that both spiral notebooks had long ago slid off the top of a chest of drawers then become wedged between the chest and the wall. At first, I wasn't sure whether I was glad to see the notebooks again or not. The spelling was atrocious, the handwriting sometimes barely legible, and the content laughably childish and highly repetitive. As I flipped through the pages, however, an entry written during a family vacation caught my eye. The week before the discovery of the diary volumes, my brother and I had been going through my parents' unlabeled photographs, trying to remember dates for trips and names of childhood friends to add to the images. We were in a situation where there was no longer anyone older to ask for that information, yet here, in an old and battered spiral-bound notebook, were the answers to several questions that we had thought would never be resolved.

Encouraged by what I found in the first two volumes, I delved into closets, bookshelves, and cabinets to bring together the other old volumes. I arranged them chronologically, first four spiral notebooks, then a handful of small cloth-bound volumes, next one or two school composition books, and finally a long series of identical hardback ledgers. To my surprise, my random writing over the years had accumulated into a total of nineteen volumes. As I dusted them off and began reading forward through my own history, I found that

despite being slightly embarrassed by the youthful quality of the content, I enjoyed the “stroll down memory lane,” remembering with unexpected ease what it was like, in many ways, to be the same age I was when the ink was still wet. Occasions I had completely forgotten flooded back, events suddenly had specific details again, and I was given a clear sense of continuity, a strong understanding that hidden underneath the immaturity and inexperience, the same person writing those entries was the same person that I am now. While this information was neither a matter of life and death nor a grand contribution to mankind in general, it held substantial importance for me. The personal information contained inside the journal, despite being forgotten for a time, remained intact to be recovered and used. Especially valuable during a time of great personal chaos, upheaval, and change, the journal was a way to prevent loss, to retain important information, as well as to expand self-knowledge and sustain identity.

At the same time that I was reading through old entries, I was filling new journal volumes at an accelerated rate. The deaths of my parents and the perusal of my personal history were leading up to major personal and professional life changes, the negotiation of which was being explored in my journal. Obviously, I was using my current journal volume differently than I was using the old volumes I was reading. Past journals were sources of information, records, and storehouses. The present volume was intended at least somewhat as a future record and storehouse, but its main purpose was to allow me a safe place to explore and articulate thoughts. The old volumes were

valuable as information products, while the current journal was valuable for information processing.

My heightened interest in my own journals led me to explore the topic in a general sense. I began reading books and magazine articles about journal writing, famous diarists, and published diaries. In time, I even led discussion-based journal workshops to share knowledge with other individuals who kept diaries. While I learned a great deal and felt that my journal experiences were similar to those of other diarists, something seemed to be missing in the fundamental explanation of this endeavor. Most of the literature focused on journals and diaries as useful elements in education or psychological therapy, yet did not explain these functions in great depth. Similarly, the diarists I met were enthusiastic but vague, issuing statements such as "My journal helps me to vent emotion so I feel better" or "The diary gets me organized." This type of information was highly useful in many ways, yet it did not explain *how* journals and diaries are useful and what processes are going on beneath the surface.

An unexpected breakthrough in my understanding of journals and diaries came after I entered the field of Information Sciences and took a graduate class entitled *Foundations of Information Science and Technology*. When reading literature by researchers such as Bertram C. Brookes (1980), Brenda Dervin (1977), and Carol Kuhlthau (1993), I realized that their discoveries about information as a phenomenon, information seeking behavior, and the construction of knowledge made sense not only as general ideas, but also in the narrower context of diaries and journals. Exploring the subjective nature of

information, the idea of a personal knowledge base, and affective reactions to information on the part of the information user led to the realization of what happens as a journal is being written. These new understandings in mind, I went back to my old journal volumes once again, this time examining the structure and uses as well as the content. I asked myself what types of information the journal held and what information problems it solved, how it had been created and what the reasons were behind its structure.

My reevaluation led me to realize that the uses of my journal are many and this writing had evolved to serve specific purposes. As a document, the knowledge recorded in the notebooks is entertaining, but also useful. For example, when I am with my oldest nephew, I find his behavior and interests easier to understand because I have a way to remember my own behavior and interests at his age. I have a possible source for dates, names, and other factual bits of information that relate directly to my life. Also, in a more holistic sense, the notebooks help me remember where I came from, a prerequisite for understanding how I got to where I am presently in my life and a useful foundation for charting my future. I can read back over my own life story in my own words, looking for patterns, backtracking to forgotten ideas, and perceiving my own growth. In short, what I had discovered in the multi-volume journal was a rich body of information. This information was highly specific, of great interest probably only to myself and perhaps a few family members or close friends, yet what I recorded has use and value. The content of each diary volume, as a document or product, has the power to remind, to clarify, to inform.

As I read through my journals, it was evident that experience over time had led me to be more aware of this power even while not yet labeling the content as "information." One example of this is that for a period of several years my entries were undated, an attempt to foil the guilty feeling that I should write on a daily basis. Soon, however, I discovered that it was sometimes important to know the anniversary of a certain event or to know how long some recorded condition had been occurring. As a result, I began to include more time-related information. Another example of increased handling of diary content as information is the management of collected quotations within my journal. Once when writing a paper for an undergraduate English class, I wanted to use a quotation that had been recorded in my journal yet found there was no corresponding citation note. From that point onward, I began including this information with all copied quotations. In addition, I began listing the books I read in the back of each journal volume to serve as something of an index for quotations, allowing more effective access to this information.

It became clear that the content of a diary or journal does indeed have the potential power to organize, to remind, to clarify, to inform. This type of documentation organizes and records information about our lives, storing that information for later retrieval. I realized that whether casual or meticulous, occasionally useful or critical to the diarist's life, journals and diaries are information systems because they are capable of performing these functions.

The connection between journals and Information Science was an exciting breakthrough for me. An answer at last! Yet it was an answer that

brought forth more questions. To call a diary an "information system" implies that the content is created in a systematic manner, that it has a recognizable and even predictable structure like other information systems such as a library catalog or a corporate database. But with a journal or diary, the structure or system is often not easy to recognize because each entry adheres closely with the present need of the individual diarist. These informal personal information systems differ from most systems studied by information scientists in that they are often intended for the use of one or a few individuals rather than many. They are often highly idiosyncratic and contain the personal and the subjective rather than information that can be considered more general and objective. Unless a diarist strongly adheres to preconceived notions about what a diary should be, his or her diary structure and style may change readily to adhere to specific and immediate information needs. I realized that to understand journals and diaries as information systems, it is necessary to look at how these documents can be defined and what other types of writing are related to them, how they evolved as a genre, how they differ from diarist to diarist, and what information problems they help resolve. And within all these questions there is also the need to understand how the journal is connected with the diarist's inner body of knowledge and how the diary can nurture exploration, thought, and understanding.

That is how this thesis project began.

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INTRODUCTION

Research Objectives: A Three-Pronged Approach

Journals and diaries are, in a fundamental sense, personal information systems. While literature about journals and diaries exists, particularly in the fields of Education and Psychology, this literature tends to focus on journals and diaries as a literary genre, as psychological therapy, or as a classroom learning device. While information plays a primary role in these functions, particularly in the latter two, exactly how diaries and journals help the diarist organize, record, retrieve, and process information is rarely addressed. This thesis seeks to accomplish this task using a three-pronged approach.

Approach One: Information Science Literature Review

In the first part or prong of the research, I conducted a review of literature within the field of Information Science. Research on the thesis topic actually began prior to the official inception thesis project with a small number of articles by specific authors. Once the thesis project was underway, additional articles were found by these authors as well as others that provided further insight into the nature of information, cognitive processes on the part of the information user, and personal information systems. This information forms the foundation of the thesis and is most evident in the introduction and chapters explaining information seeking behavior and subjective information. These sections, particularly the portions devoted to the explanation of a personal knowledge

base and the exploration of information seeking as a cycle, are necessary links to join with the second prong of the thesis research, further exploration of literature on journals and diaries.

Approach Two: Journal and Diary Literature Review

While Information Science literature was being examined, I was also researching journals and diaries to add to my previous knowledge. As this part of the literature review continued, it became increasingly clear that the journal is a highly flexible means of dealing with information so that once a scholarly knowledge base on the topic was constructed, a wide survey of diary forms and uses would be necessary.

What also developed was a related understanding involving the literature on journals and diaries; this body of literature differs from the Information Science literature in a key way. All human beings use information, but the available literature on information as a phenomenon and on systems dealing with information is written by professionals in academia. Valuable insight is sometimes brought in from fields besides Information Science such as Communications and Philosophy, but those producing the literature are almost always professional researchers intent first and foremost on expanding the scholarly knowledge base. This is not the case when looking at the broad range of information available on journals and diaries.

Journal and diary literature originates from a broad range of authors with varying degrees of experience. In the literature on journals and diaries, some

academic works come from self-proclaimed diarists while other works are produced by writers who address the topic as non-diarists or "outsiders." When looking for evidence of a variety of diary forms and uses, the latter works were of less use to the thesis project. In addition, friends and colleagues began sharing materials that they felt would be of interest to me and these sources were often newspaper or magazine articles intended for the general public. While reading these articles, I realized that they are a good source for uncovering attitudes from the general public concerning diaries as well as individual insights of the diarists themselves. What became apparent is that because diaries are primarily personal documents and are rarely shared, formal training does not exist as it might for some other forms of writing or other types of information systems. There are workshops and how-to materials for diarists, yet there are no widely prescribed conventions. Instead, information on this type of writing is often in the form of advice or observations offered by diarists themselves. Popular sources presenting articles on the topic of diaries often interview and quote diarists as experts. From reviewing the total of available literature, I discovered that three types of literature on journals is available:

1. *Academic* -- These materials are documents produced by scholars for the purpose of expanding the knowledge base of a discipline. The materials in this group are primarily monographs, textbooks, or journal articles, especially those produced by academic presses and scholarly periodicals. Relatively few authors of this type of material claim to be diarists and include insight gleaned from their experience.

2. *Professional* -- These documents are produced by formally educated individuals in academic disciplines or professional fields. Their works are created for the purpose of aiding individuals interested in the given topic.

These materials are primarily monographs but also include magazine articles written for those in a specific profession (i.e. magazines specifically serving professional writers or artists). Many, although not all, of the monographs may be considered "self-help" or "how-to" books. The intended audience of these documents are individuals that have an interest in the subject. Most authors of this type of material claim to be diarists and include insight gleaned from their experience.

3. *Popular* -- These documents are sometimes produced by scholars, but they are mainly written by diarists and/or journalists for consumption by the general public, although magazines for specific hobby interest groups are included in this assemblage (i.e. sports or nature studies). These materials are primarily magazine and newspaper articles including news reports and short essays. The intended audience of these documents may or may not have an interest in the subject beyond reading the article at hand. Many authors of this type of material claim to be diarists and include insight gleaned from their experience. They also tend to interview or use quotations from diarists in their writing.

Traditionally in scholarly research, popular sources are not used. The intent, extensiveness, and quality of the research is often either not discernable or is inferior. Excluding these sources was not a problem when constructing a knowledge base about journals and diaries. I found that the academic and professional sources provided a rich and useful background. Nevertheless, because journals and diaries as information systems are so individualized, one of the goals of the research is to explore and expand the possibilities of what kinds of information can be stored or processed and what types of structure may be used in the creation of a diary. Popular sources provided an abundant and useful array of diarist experiences.

As was previously mentioned, the academic and professional literature on diaries was used to create the foundational information that, along with the Information Science literature, forms a basis for the thesis. Rather than

completely ignoring the popular sources, they were used in a different way than the academic and professional ones. As the total body of literature on journals and diaries (academic, professional, and popular) was explored, quotations from diarists explaining why they keep their journals and what benefits they receive from them were entered into a computer file. At the conclusion of the literature review, the complete file was printed out and the quotations were separated by cutting the file pages into strips. The strips bearing the quotations were then reread and arranged in piles by how each quotation addressed information issues. The resulting piles or themes supported the Information Science literature review findings, highlighted specific ways that journals and diaries are used as information processes and products, and became the basis of the third prong of the research.

Approach Three: Interviews

At this point in the research, it was evident from the total body of materials read that the first prong, or the Information Science literature review, was indeed compatible with and related to the second prong, or the journal and diary literature review. Sufficient evidence existed in the dual literature review to substantiate the hypothesis; journals and diaries are information tools and information systems. The body of the thesis could be written by intertwining discoveries concerning Information Science and journals. The problem remained, however, that some of the richest information, concrete examples and evidence of the variety found in journals and diaries, came from the popular

sources of the second literature review. The experiences of actual diarists are vital to the effective exploration of these highly-individualized information systems, yet the popular sources that yielded this type of information were often not trustworthy. However, original research in the form of interviews with diarists could effectively explore the themes discovered in the second literature review prong while providing quality information gathered using qualitative research methods.

The discovered themes, which later formed the structure of those sections of the thesis concerning journals as product and process, fell into five research areas:

- 1). Why diarists keep their journals/diaries and what benefits they receive from this practice
- 2). What types of both factual and affective information diarists record
- 3). What methods are employed by diarists to effectively record information
- 4). What methods are employed by diarists to effectively access the information stored in their journals/diaries
- 5). How journals/diaries serve as a diarist's tool for processing information and as primary sources of information both for the diarist and for potential readers

To explore these areas, I wanted to find a small number of diarists that could be interviewed in depth. I understood that my own diary had evolved over time to follow my information needs and that it was only after many years of writing that many journal uses had come to light. Therefore, I wanted to interview diarists who had considerable time and experience with their journals. In addition, the thesis project intends to show a variety of possible uses and information needs involved with journals rather than to draw generalizations

about average journal use. Therefore, the participants for this study were all from an academic setting. By using this specific population, I was able to locate individuals willing to participate who possessed and exhibited advanced writing and organization skills, part of the skills that can transform diary-keeping into a valuable information tool.

Three of the participants used in the study were colleagues who volunteered to participate after learning the nature of the research. The other two interviewees were previously unknown to me but were recommended by colleagues as diarists fitting the study requirements who might be interested in voluntary participation. All participants were informed about the nature and purpose of the study and informed that they were under no obligation to participate. Information on the diarists interviewed is provided below for context. Names have been changed where requested while ages and occupations appear as provided by the participant.

1. Alexandra, age 31, graduate student -- began keeping her journal at the age of eight and has 23 years of journal experience
2. Elizabeth, age 26, writer and librarian -- began keeping her journal at the age of six and has 20 years of journal experience
3. David, age 61, consultant -- began keeping his journal at the age of 38 and has 23 years of journal experience
4. Jaclyn, age 21, student and writer -- began keeping her journal at the age of 7 years and has 14 years of journal experience
5. Penelope, age 57, teacher (college-level English classes, including a course on journals during certain semesters) -- began keeping her journal at the age of 45 and has 13 years of journal experience

Sixteen basic interview questions were posed to the diarists with support questions (shown below as a bulleted list after each question) used to draw out more elaborate responses when necessary. These interview questions were formulated using the five research areas developed directly from the themes gleaned from diarists during the literature review. The first five questions were posed in order to understand some background information concerning each participant's journal habits including how important their journal seemed to be in their life, their attitudes toward their writing, and how the format of their journal may have evolved with information needs.

- 1). What do you call your writing or how do you label it?
 - Do you refer to it as a journal, diary, notebook, log, or by some other term? Why?
 - Does your journal/diary have a title like a book? Why or why not?
- 2). When did you begin keeping your journal/diary?
 - What prompted or inspired you to begin?
 - Do you think you'll always keep a journal/diary? Why or why not?
- 3). How often do you write in your journal/diary?
 - Have you kept your journal/diary consistently? Why or why not?
- 4). What is the length of an average journal/diary entry?
- 5). What format or writing equipment do you prefer for your journal/diary?
Why?
 - Bound blank book or loose-leaf sheets of paper?
 - If you prefer loose-leaf format, how do you keep your sheets together?
 - Handwritten or word processed?
 - For handwritten entries, do you prefer lined or unlined pages?
 - For handwritten entries, please describe what writing utensils you prefer (what type of tip, what type of ink, etc.) and why.

The sixth question was, in many ways, the most important in the interview. Spending time on this question allowed each diarist to talk directly about the content of their journal, revealing information possibilities and uses.

- 6). What sort of things do you tend to write about in your journal/diary?
- Does the information in your journal/diary tend to be more factual (descriptions of events, daily itinerary, recorded data, etc.) or affective (your observations and emotional reactions)? Why?
 - Do you tend to write most about your personal life, your professional/career life, hobbies/interests, or other facets? Why?

Questions seven and eight attempted to show how diarists not only vary in the content of their journals, but also in how the content is handled, organized, or processed. This is part of what makes the journal an information system.

- 7). Do you ever include elements that are visual rather than including only text?
- Do you ever include hand-made visual elements such as sketches or maps?
 - Do you ever include materials such as magazine or newspaper articles, photographs, cartoons, or scrapbook-type materials like ticket stubs and greeting cards?
 - If so, why do you include these visual and/or artifact elements?
- 8.) How would you describe your writing style in your journal/diary?
- Do you include lists, poetry, prose, or a combination of these? Why?
 - Do you tend to write in complete sentences, with correct spelling, or using proper grammar? Why or why not?
 - If you include information about conversations you experienced, do you tend to reproduce the conversation or simply describe it? Why?

Questions nine and ten focused on the diary as a personal document or information product. These questions explored how and why diarists use

previous writing. Related to this is the idea of audience or the use of the diary by others, addressed in questions eleven or twelve, which may affect diary content.

- 9). How often do you read old entries?
 - If you read old entries, does reading them reveal patterns or show repetition?
 - Tell me about a pattern or repetition that you noticed by writing or while reading old entries.
 - If you don't read old entries, why not?
- 10). Do you use your journal/diary as a reference to answer personal or general information needs? (An example might be remembering a name or date)
 - Do you use your journal as raw material for letters, speeches, artwork, creative writing, or other projects?
 - If you use your journal as a personal reference, how do you locate the information or raw material that you need?
- 11). For whom do you keep your journal/diary?
 - What audience(s), if any, would you like to someday read your work?
 - What use do you hope others will get from your journal/diary?
 - If you wish for your journal/diary to remain private, how do you safeguard it?
- 12). How revealing is your writing?
 - Would you say that there are things you will not reveal even in your journal?
 - Would you say that there might be conditions under which you would falsify information in your journal?

Questions thirteen through fifteen shift emphasis from the diary as an information document or product to its use as an information processing tool.

- 13.) What causes, motivates, or inspires you to write at particular times?
 - When is your writing most extensive or intensive?
 - Tell me about a time when your writing was particularly extensive or intensive.
- 14). Do you think your journal/diary helps you sort through, clarify, or process information (factual or affective)?
 - Tell me about a time when your journal/diary helped you to do this.
- 15). Do you find writing in your journal/diary brings catharsis or release?
 - Tell me about a time when your journal/diary helped you to do this.

The final question, which was often followed by general discussion of diaries, allowed the diarists an opportunity to sum up their feeling about their work or about journals in general.

- 16). If a friend asked you why you keep your journal, what would you tell them?
 - Would you recommend journal/diary-keeping to a friend?

In addition to the primary and secondary questions listed above, I posed many tertiary questions to encourage the interviewees to expand on their responses or as the responses from previous interviews led to further research possibilities. Following the interviews, I transcribed the content, removing any personal names or specific place names mentioned in the interview if this had been requested by the participant, then analyzed for each interview for information-related themes.

The resulting thesis is, in essence, braided using the three prongs or approaches. Discoveries from the Information Sciences literature review and the journal and diary literature review, which might have remained simply intertwined, are now woven together as a result of the interview content and

effectively explore journals and diaries as information systems. While this method is highly useful in addressing the research hypothesis, it is somewhat problematic. To carry the braid metaphor a step further, it is impossible to braid together three cords without selecting one of the three to move first. In the case of the thesis, one of the approaches had to be introduced before the three could be shown as interconnected. It must be assured that each element is clearly defined and addressed in its own right. To accomplish this, the thesis content basically flows in three sections. The first section provides background on how the research began and outlines the overall methodology involved. The second section looks at the elements separately then begin weaving them together. The third section relies on all three approaches, using elements from each to explore journals and diaries as information systems.

Introducing Journals and Diaries as Information

The journal is a means of *acquiring*, not merely recording knowledge...[It] is necessarily a protean, radically open form, unbounded by considerations of chronology, transcending past-present-future demarcations, unlimited by conditions of accuracy and verifiable truth. Its authenticity comes from the honesty of the writer and the writer's willingness to embark on an uncharted course, with the courage to allow the unknown to enter...It is a liminal genre, without conventions, limits or boundaries, used to travel into liminality, where unknown parts of the self and the environment are glimpsed. Journals allow one to construct a self with cogent design, a set of symbols, a history.

-- Writers and researchers Barbara Myerhoff and Deena Metzger
(Gannett 1994, 280)

A journal *is* a means of acquiring, not merely recording knowledge. And it is a means that is complex; sometimes it even seems contradictory. It serves as an informative document, a product, but it also serves as a part of the diarist's information seeking behavior, a process. It is an information phenomenon that is an external articulation of knowledge, yet it often is raw and unpolished so that it seems closer to amorphous thought than to sharable information. Confused stream-of-consciousness writing appears in the diarist's volume, but then a page is turned and the same diary is communicating understanding in highly effective ways. Depending on the diarist, on the current need, even on whim, the flexible journal moves from the objective and concrete to information expressed through the symbolic or the metaphorical. One set of pages explores academic and professional dilemmas, while the next set of pages addresses the deeply personal and emotional. Sometimes both are addressed at once. The diary is a product with an often subjective nature, yet the journal is also a process that can help the writer become more objective.

Despite the information capabilities of these documents, however, many stereotypes and misunderstandings exist about what a diary can or should be. In particular, the diary is often thought of as the domain of teenaged girls, existing primarily in the format of a tiny bound book with a small lined writing space provided for each day as well as a lock on the cover (Bender 1997, Daly 1985, Gordon 1994, Horvitz 1997, Johnson 1997, Miller and Miller 1995, Rainer 1978, Shapiro 1989). The implication is that the diary is most useful or interesting during puberty's surge of emotion-producing hormones, that it is

gender-specific, that writing must be a daily task, that a diary's format is not meant to be flexible, that a diary is never shared, and that this device is left behind upon reaching adulthood. This is a gross underestimation of what a diary can be and what a diarist can accomplish using this tool.

In light of these understandings, it is the goal of this thesis to explore the possibilities of the diary as an information seeking, processing, and recording tool which, as a repeated of diarist behavior, also becomes an information system. To accomplish this goal, it is not enough to study journals as an isolated subject. Instead, this thesis also examines information seeking and processing in a general sense, so as to integrate understandings of user, tool, and applications. Integral to this study is the understanding of the journal as an adaptable tool limited only by the diarist. The journal can be applied to any area of the diarist's life where there is a need for gathering and storing information and can be as extensive or intensive as the diarist allows it to be. Due to the possibility for expansiveness within this form, objectivity and subjectivity will be concepts of great interest to the thesis as well. In consideration of these goals and interests, the best place to begin is with an understanding of information, knowledge, and the human knowledge base.

Popper's Worlds of Knowledge

In 1980, information scientist Bertram C. Brookes wrote an article for the *Journal of Information Science* entitled "The Foundations of Information Science. Part I. Philosophical Aspects." In this article, he explores

philosophical and cognitive aspects of information including a model of knowledge that was presented by philosopher Sir Karl Popper in his book, *Objective Knowledge: An Evolutionary Approach* (1972). According to Popper's ontological scheme, there are three worlds of knowledge.

- *World 1* consists of "The physical world, the cosmos in which Earth, vital though it is to us, is but an insignificant speck in the immensity of the universe of radiation and matter (Brookes 1980, 127)." Popper also calls this "the world of physical states (Popper 1972, 154)." Basically, World 1 is everything that can possibly be known. It is independent from human beings in that it exists even though we aren't aware of every part of it.
- *World 2* consists of "The world of subjective human knowledge or 'mental states' (Brookes 1980, 127)." This is our *knowledge base*, our understanding and our thoughts. World 2 functions both on an individual or personal level and on a collective or shared level. Everything that a person knows is their individual World 2. Combine what that person knows with what every other person knows, and this is the collective World 2. World 1, which is everything that can be known, is much larger than the subset collective World 2, which is everything that is known by humankind.
- *World 3* is "The world of objective knowledge, the products of the human mind as recorded in languages, the arts, the sciences, the technologies--in all the artefacts [*sic*] humans have stored or scattered around the earth (Ibid)." World 3 is composed of products created from various individuals' World 2 knowledge. Popper states that World 3 originates as a product of human activity and is "the product of men, just as honey is the product of bees, or spiders' webs of spiders (Popper 1972, 159)." Human beings sort through and organize their understanding, World 2, to construct books, artworks, machines, and other objects.

Brookes uses a Venn diagram to make Popper's idea available as a visual manifestation (Brookes 1980, 127). Using a trefoil pattern, Brookes presents the diagram in his article, which has been recreated in Figure 1.

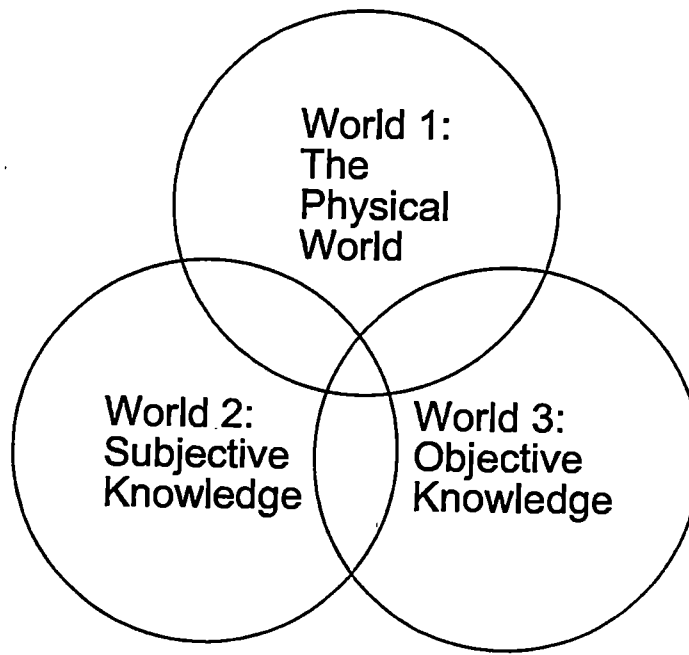


Figure 1. Re-creation of Brookes' Venn Diagram of Popper's Worlds

While a Venn diagram can be very helpful in visualizing Popper's model, Brookes' diagram carries the implication that an individual's knowledge base is not a part of the total universe. Similarly, Brookes' diagram implies that it is possible to have a World 3 object that is not part of some individual's knowledge base and that is not part of all that can be known. Instead, a concentric Venn diagram may be used as in Figure 2.

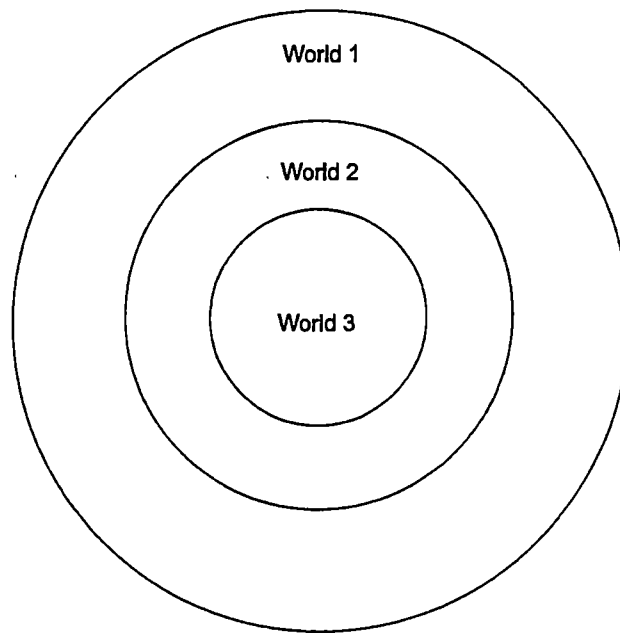


Figure 2. Concentric Venn diagram of Popper's Worlds

To continue the discussion of Brookes' and Popper's ideas, it should be pointed out that the term "objective," as used by Popper, reflects a different meaning from the more common use of the word. Popper is pointing to what he calls an "autonomy" in World 3 (Ibid., 159). Once an idea is transformed into written text or once a painting has been created, it is autonomous in that it now exists on its own as an object, separate from its creator and available for use by others in a way that intangible thoughts are never available. Brookes clarifies this idea in this way:

In other words, once human knowledge has been recorded, it attains a degree of permanence, an objectivity, an accessibility which is denied to the subjective knowledge of individual humans. A gifted human may acquire wide knowledge, deep wisdom and spiritual insights but all this is lost when he dies except for that which he has recorded in some artefact [*sic*] (Brookes 1980, 128).

Unless articulation occurs, a human being's knowledge, his or her personal World 2, remains imprisoned and cannot be communicated, cannot be shared. Unarticulated knowledge is that which was never expressed as information and has never been transferred to other individuals' World 2s. It has never has a direct impact beyond the individual who holds that knowledge and, ultimately, the knowledge will die with that individual if it remains unexpressed. Articulation, particularly articulation as a World 3 object, allows information to transform the lives of others and to be built upon using subsequent information. This is how culture and science grows. Information Science is deeply involved with the effective organization and transfer of informative World 3 objects.

With the ideas of Popper and Brookes in mind, another layer of understanding can be laid to show how diaries are information tools. Diaries are informative World 3 documents that represent part of what is in the diarist's World 2. They are a way articulating knowledge and creating a World 3 document that can be used as information by themselves and others. At the same time, the often private nature of the journal allows creative problem solving and the focused exploration of ideas in an arena where the diarist does not have to expect a reader, does not have to be self-conscious. These

explorations may be related to a specific problem or to the diarist's life in general. The diary can be a safe place for reflection, a way for the diarist to give order to experiences, emotions, and ideas from many spheres of life, both formal and personal. The diarist begins to construct an understanding of their own World 2, of the world as they see it and as it relates to others, as it relates to both vocational and avocational pursuits.

More specifically, this thesis will explore the process of recording information that helps the diarist to focus attention on ideas or problems, organize elements and variables, perceive patterns or gain perspective, then build meaning. It is a cyclical process moving towards order and clarity of information that results in a product, an informative World 3 object that can be used by the diarist and by others. And, as will be investigated, the diary is especially valuable as an individual's method of dealing with different types of information from a variety of sources and diverse spheres of life. Because these information tools are flexible and connected closely to the individual, this thesis will seek to not only examine patterns and draw generalizations, but also to explore the possibilities of these tools.

AN INTRODUCTION TO DIARIES: EXPLORING AND EXPANDING POSSIBILITIES

What is a Journal or Diary?

Scholar Rachel Steinitz, in an article for *The Communication Review* on diaries, observes that the diary as a genre is defined more by composition process than content (1997). Noting such forerunning scholars as Ponsonby, Fothergill, Kagle, Mallon, and Blodgett, she puts together a concise and functional definition that seems to agree not only with the scholars she has listed, but also with scholars such as Gannett (1994), Kagle (1979), Mathews (1945), and Spalding (1949):

Historians and critics generally agree that, content aside, what characterizes the diary is that it is written, give or take, in the present about the present, rather than retrospectively; that it is serial, written over a span of time, in installments, as it were; and that it somehow refers to actual experiences, material or mental, of the writer (Steinitz 1997, 45).

For the purpose of this thesis, the idea of recording and processing personal information is of primary importance. With this consideration and with the additional consideration that a diary may include occasional writing about the past, this thesis adopts Steinitz's definition. Due to the relationship of these documents to Information Science, as will be explored further, those documents that contain both objective and subjective information and that are valuable for both product and process will be of primary concern. These documents may be used as rough drafts for other projects, but they are generally spontaneous and edited either minimally or not at all within their original form.

Part of coming to a useful working definition of a diary may be to distinguish it from other written works that either resemble it or are related to it in some way (Fothergill 1974). Of the writing forms that adhere most closely with the purpose of the thesis as is outlined in the paragraph above, "journal" and "diary" are the most common terms. Other terms that are most often used synonymously with these two terms include "notebook" and "log." Although there are exceptions and although differences between forms may be slight, some general rules are outlined below to help clarify meanings:

- *Calendar* -- A calendar is a form of diary as long as it contains information related to the user. However, most documents that might be labeled as a "diary" differ from this type of record in that they are usually worded or structured in such a way that entries may be useful over time. More detailed notes or descriptions may be added to a document typically called a "diary" than a document typically called a "calendar."
- *Log or Log Book* -- The term "log" is sometimes used synonymously with "journal" or "diary." At other times, a log is used for keeping a list of similar information in a prescribed form, such as a pilot's list of flights along with information about each flight. In this second sense, a log book is still a form of diary, but, like the calendar, it must contain information personally relevant to the keeper in order to be considered such.
- *Account Book* -- Technically, an account book is type of diary if it relates directly to the person keeping it. Like calendars and log books, however, these documents may not accomplish the same information tasks or goals as other types of diaries as they are much more useful as products than as a processing aid. (This will be explored later in the thesis). This is also true of documents such as personal address books.
- *Academic Notebook* -- The information recorded in a diary may resemble notes taken in a classroom setting or even contain notes from a classroom setting, but an academic notebook should not be considered a journal

unless it comes to include the writer's own ideas, thoughts, or personal information (Fulwiler 1980). The diary usually differs from this type of record-keeping in that the content is somehow closely rather than marginally related to the diarist's life and interests and is generated by the diarist and a myriad of other sources rather than by a single source such as a teacher's lectures.

- *Letters* -- Diaries may resemble letters, but diaries are generally intended for the writer's use rather than a reader's. Diary scholar Arthur Ponsonby writes, "Letters may contain fresh impressions and personal confidences and confessions, they may be written in almost diary form, but the consciousness in the writer of an immediate recipient exercises a restraint on the author and produces a certain sort of self-consciousness which may be entirely absent from the pages of a diary (Ponsonby 1923, 2)." Nevertheless, the impact of a potential audience varies from writer to writer. Letter writers sometimes purposefully copy their documents and preserve a collection which accomplishes the same goals as a diary. If a writer considers a collection of their own letters to be a journal, then the content becomes more important than the composition process and the collection should be considered a diary (Bender 1997).
- *Memoirs or Autobiographies* -- Diaries may resemble memoirs or other autobiographical writings, but are written in installments and focus primarily (but not necessarily solely) on current issues and events. Ponsonby reasons, "A diary differs from autobiography, as in the one we get the fresh relation of events at the moment, and in the other the events are moulded [*sic*] and trimmed into a unified whole...(Ponsonby 1923, 2)." Diaries may include memoir sections and may even contain passages that have been edited or molded, but the diary should basically be a spontaneous document examining present events and conditions.
- *Essays and Poetry* -- Diaries may include these types of writing and, in fact, a reader may have difficulty distinguishing between a diary and a collection of essays or poetry if they somehow relate to the diarist's life or interests. However, as was discussed in the entry concerning *Memoirs or Autobiographies*, diaries are generally spontaneous and relatively unpolished.

- *Commonplace Books* -- These documents are collections of quotations, anecdotes, or text passages either centered on a theme or selected due to the interest of the compiler. Diaries may include similar borrowed text, but this is not their sole purpose.
- *Sketchbooks* (or other artwork) -- While this type of book may fulfil many of the same goals for its creator as a diary does for a diarist, this type of book should not be considered a diary unless it includes the verbal as well as the visual and unless the content is closely related to the diarist's life and interests.

As one can see, defining "diary" or "journal" is not an easy task. Personal documents vary greatly and are largely self-defined. In a more minimalist approach, Robert A. Fothergill, author of *Private Chronicles: A Study of English Diaries*, created a more pragmatic and perhaps more realistic definition of the word to follow his lengthy discourse on the topic. "In general let it be agreed that a diary is what a person writes when he says, 'I am writing in my diary (1974, 3).'"

Another complication in finding a suitable definition for journals and diaries is that the two words are usually but not always used interchangeably. The words "journal" and "diary" share common roots. The French word for day, *jour*, is believed to be the basis for the word journal. Both "journal" and *jour* as well as "diary" originated with the Latin words *diurnalis* or "daily" and *diarium* or "daily food or allowance" (Schiwy 1996, Miller and Miller 1995). Diary scholars have traced the use of both words and have found that in the past the terms were used more or less interchangeably (Schiwy 1996, Mallon 1995). By the twentieth century, however, the words became linked to various connotations.

Steinitz, as with many scholars addressing the topic, begins her article entitled "Writing Diaries, Reading Diaries: The Mechanics of Memory" with discourse on what a diary is and how or if it differs from a journal. In the course of this section, she quotes writer William Gass, who claims "that the *diary* 'should be filled with facts, with jots, with jogs to the memory,' while in the *journal*, 'Facts diminish in importance and are replaced by emotions, musings, thoughts (Steinitz 1997, 46)." It would be easy to start with such a definition. However, other writers, scholars, and diarists hold conflicting views. One of the early diary scholars of the twentieth century, Arthur Ponsonby, stated in the introduction to his book *English Diaries: A Review of English Diaries from the Sixteenth to Twentieth Century*:

The word journal should be reserved for the purely objective historical or scientific records, and the word diary for the personal memoranda, notes and expressions of opinion. Some of it is true might fall across the division. But as it is, the words are used quite indiscriminately and give no guidance as to the nature of the record (Ponsonby 1923, 5).

"Journal" and "diary," then, are terms not easily agreed upon.

In most academic literature on diaries and journals, as will be the case in this thesis, the terms are used interchangeably. Thomas Mallon, author of *A Book of One's Own: People and Their Diaries*, one of the most widely-quoted books on journals, is one of many scholars who uses the terms synonymously. However, Mallon notes that when it comes to individuals and their opinions, the two terms most widely used to identify journals and diaries still carry differing connotations despite their compatible use in most literature. "They're both

rooted in the idea of dailiness, but perhaps because of *journal's* links to the newspaper trade and *diary's* to *dear*, the latter seems more intimate than the former (Mallon 1995, 1)." The word "diary," in particular, seems problematic. Diarist and writer Debra Gordon seems to sum up the opinions of many when she notes that many journals being created today are "a far cry from that first journal most women remember, the fake-leather covered book with the tiny gold key and embossed script reading 'My Diary' that some well-meaning aunt gave you for your 13th birthday. Where we scribbled pithy comments like, "Susie is my best friend. I think Mark is sooooo cute," in cramped writing on the lined paper (Gordon 1994)." The attitudes of diarists towards the terms used for defining their writing, as echoed by Gordon, betrays a fear of devaluation, particularly if the diary contains subjective information. This idea will be explored further in subsequent sections of the thesis. For the time being, it can at least be understood that defining what a journal or diary is can quickly become an emphatic statement of what it is not.

Of the five diarists interviewed for this thesis, four preferred the term "journal" over "diary" or any other term. Penelope notes that the terms can be used synonymously, yet she shows a preference for one over the other:

I don't know. I use the two terms interchangeably when I talk about them, but I just think of mine as my "journal." I guess because to me that has more depth. Some people keep "diaries" that are just logs. This is more than that, so I guess that's why.

Alexandra similarly notes the idea that either term can be applied to her writing:

I call it either a "diary" or a "journal." It depends. I guess in my own head I think of it as a "diary." Since I've encountered other people who do the same thing but call it "journals," I've started to call it a "journal."

However, Alexandra also notes that "diary" may not be taken as seriously as a "journal":

"Journal" seems somehow slightly more formal and more grown up to me. I think it started to make sense to me to call it a "journal" because now it contains more than it used to.

Elizabeth's choice of the term "journal" echoed several other interviewees:

I think it's because it's the most respectable label. "Diary" and "journal" are the most common, but "journal" sounds a lot more formal, but...well, not necessarily formal, but more what I want it to be. "Diary" sounds like a twelve year-old writing about her boyfriends and her crushes to me.

Jaclyn's response used even stronger wording and showed a preference for the term "journal" that was quite strong:

One of my first journals had "Diary" on the front cover and I scratched it out and wrote "Journal" because I didn't want to seem pathetic. I don't know. It just seemed kind of melodramatic to keep a "diary," so I thought I'd keep a "journal."

The way each diarist has chosen to label their writing betrays how they wish their writing to be considered, perhaps both by themselves and others.

Penelope considers her journal to have "depth" and stated that it is more than being a simple log, implying that it contains some of the elements of a log, but with additional aspects. Alexandra also stated that her journal contains more than a "diary" might, noting that it "contains more than it used to," referring to a

time when she more firmly considered her writing to be a "diary." Variances in journal use, content, forms, and styles will be discussed at greater length in later sections of the thesis. In the meantime, the attempt to define "diary" and "journal" has uncovered a dilemma which must be addressed. That dilemma, which will be discussed in terms of objective and subjective information, is that some forms of information carry greater weight or respect than others, are considered more useful or more valid than others. This will be further revealed in sections of the thesis related to the history of journals as well as process-oriented and product-oriented information uses pertaining to self-knowledge.

How Many Diaries and Diarists Are Out There?

In 1989, it was estimated that about 12,000 diaries have been published in English (Moore 1989). Forty years before this statistic was gathered, diary scholar P. A. Spalding noted a truth in English diaries which is almost undoubtedly still true for the present and for the future as well as for diaries in all languages:

For every diary which has attained permanence between covers, how many survive unpublished? For every diary which has survived a century or more, how many have perished without a trace? It is impossible to assess these proportions, but it is safe to compare the incalculable total of English diaries with the iceberg, the bulk of which is submerged (Spalding 1949, 69).

If it is impossible to detect from the number of published diaries how many total diaries have been created or are being created, it is equally impossible to ascertain this information by relying on the sales of blank journal

books. One source announced in 1995 that more than five million blank diaries are sold each year in America (Miller and Miller 1995). Another source noted that books of blank pages are perennial best-sellers in book stores (Hailey 1986). And sales rates are growing. Curxon, a New York-based publisher that supplies blank books to stores, saw sales triple between 1991 and 1997 (Boss 1997). But how many of these books are actually being used rather than sitting on bookshelves collecting dust? And even if these volumes are used, how often are they actually being used as diaries? How many diaries are kept in other formats? A better approach may be to attempt to find statistics on diarists themselves.

In the early 1920's, Arthur Ponsonby, the compiler of *English Diaries: A Review of English Diaries From the Sixteenth to the Twentieth Century*, took a survey of "a hundred educated people chosen at random" to see how many diarists would be among the group (Ponsonby 1923, 40). While he himself admits that "the number is too small to serve as a basis for any enlightening deductions" and while it is impossible to know whether the methodology used was appropriate and effective, it is nevertheless interesting to see his results. Of the one hundred individuals surveyed, Ponsonby found that twenty four kept diaries. Of the seventy-six who did not keep diaries, twenty-six had kept diaries either during their childhood or for special occasions (Ponsonby 1923, 40-41).

In more recent and more scientifically accomplished surveys on voluntary journal-keeping, statistics vary. In a 1982 study, researcher C. P. Thompson discovered that 32% of college students kept personal diaries

(Accardo et al 1996). In 1994, Australian researcher Christopher D. B. Burt published the analysis of a survey of 478 individuals between the ages of 16 and 59, discovering that 32% of males and 72.6% of females sampled indicated that they were keeping a diary or had kept a diary at some point in the past (Burt 1994). (Differences between genders as related to diary-keeping will be addressed later in the thesis.) Researchers C. M. Accardo, D. C. Aboyou, B. A. Alford, and J. T. Cannon reported results of a similar study in 1996, but one that targeted undergraduate students in fundamental level psychology courses. Their results indicated that 55% of the participants reported having kept a diary at least once (Accardo et al 1996).

The Personal Significance of Diary-Keeping

Statistics can be gathered to estimate how many people are keeping diaries, yet these statistics may not reflect how important diaries are to the diarist, the extent of personal value placed on this information tool by those who use it. Although there are undoubtedly casual diarists, many diarists discover that this tool becomes a major part of their lives.

- The longest kept diary, according to the *Guinness Book of World Records*, belongs to American author and historian Edward Robb Ellis. Before his death on September 7, 1998 at the age of 87, Ellis wrote some 22-million words in his journal. The diary, which was begun in 1927, reached 70 volumes.
- In 1944, at the same time that Ellis was keeping his diary about life in his thirties, German writer Luise Rinser was imprisoned for her resistance work against the Nazi government. After over a week spent in a women's prison in Bavaria, she discovered some paper

and a pencil hidden beneath a loose floorboard in her cell and began to keep a secret diary. When her supply of paper was gone, she persisted in her task despite the fear that she might get caught, continuing her journal on the back of toilet paper made from old lists of criminals (Schiwy 1996). Also during World War II, one prisoner fashioned a diary by folding down the sides of metal powdered milk containers, scratching out entries listing the books he read, the names and addresses of fellow prisoners, and the calendar of his captivity (Miller 1995). Still another World War II prisoner used the pins from blackout curtains to prick words on rolls of toilet paper, which he then dropped through a grate and recovered years later (Cummings and Arken 1983).

- Gayle Davis, a historian who has studied the diaries of American women on the frontier notes that "...diaries as objects acquire extraordinary status in their authors' lives. Witness those women who lock or hide their diaries, who rescue them from a fire or flood's threat of ruin before most other possessions, or who specify the disposal of the books in their wills (Davis 1993, 169)." Diarist James Cummings states, "The kids know that if there is a fire in the house and they have two minutes, they should throw the diaries out first (Matchan 1984)."

To keep a diary requires effort on the part of the writer. Record-holding diarist Edward Robb Ellis showed great tenacity over the course of seventy one years, writing almost daily. Even when constructed in installments and even if the total diary is considerably less than twenty-two million words, a diary requires time and energy on the part of the diarist. Why take the time and make the effort to create a journal? Why might a journal become part of an individual's survival tactics either in everyday life or in times of great stress? Why can diaries become of such primary importance to the diarist's life?

Ellis called his journal "a daily confrontation with the unconscious" and stated that "[A diary] defines experience and enables us to understand [life] far better than if we just lived through it (Fisher 1995)." Washington Post journalist

Marc Fisher who interviewed Ellis in 1995 suggested, "[Ellis' diary] is a weapon against time, a way to force himself to reflect. It is his reminder, a device for retrieving lost bits of life (Ibid)." Of prisoners' diaries, editors Randall M. Miller and Linda Patterson Miller note in the introduction of *The Book of American Diaries* that, "...soldiers marching to battle, and prisoners of war going nowhere often found keeping a journal the only way of relieving the monotony and brutality of daily life and preserving their sanity. Such individuals went to extraordinary lengths and even risked their lives to record their daily activities and thoughts (Miller and Miller 1995, xii)." They also state, "Young men and women facing death began to think about life. In war their lives suddenly assumed meaning as part of history in the making, just as imminence of death demanded that some record of their individual lives be left behind (Ibid., xvii)." Prisoner Luise Rinser wrote in her diary on October 22, 1944, "When I was still free and could write when I wanted and as often as I wanted, I often doubted the point of the exercise; now I consider it a great personal good. The Word mercifully cushions me, coming between me and the naked experience of imprisonment (Schiwy 1996, 61)." Diarist James Cummings, who considers his diary his most important possession, notes "There is an itch to preserve with me" and adds, "Otherwise, your life is just a vague recollection of half-remembered events (Matchan 1984)."

That diaries are of great importance to these individuals is easy to ascertain. To understand exactly why the journals are so important and what they accomplish in the lives of the diarist is much more problematic despite

statements like the ones above. One aspect of this difficulty is that each journal is specific to its writer. The reasons why one person is writing may not be the same reasons why another writes. Generic conclusions are difficult if not impossible to reach with any confidence. Because of this, oftentimes even in professional and academic literature journals and diaries are discussed in ways similar to a magic elixir. *This is good. This is helpful. This helps an individual increase their knowledge.* But *why* is this so? What goals might a diarist have in mind and in what ways might a journal accomplish these goals? Diarist and scholar Marlene Schiwy, who had kept a diary for 25 years at the time she wrote *A Voice of Her Own: Women and Journal Writing Journey*, notes the dilemma of trying to define the uses and benefits of journals:

As anyone who has kept a journal over time knows, it is almost impossible to describe the role it comes to play in one's life. It has clearly been the single most consistent and stable factor in my life, and it largely defines who I am and have become and how I think of myself. If I had to stop writing now for some reason, it would feel like losing a limb (Schiwy 1995, 239).

The answer to the question of why journals are important to their keepers and how they can benefit the diarist's life lies in the interrelationships between journals and information, specifically with the construction of a knowledge base and the integration of the objective and subjective, professional and personal. But before these interrelationships can be explored, some basic questions about journals and diaries must be addressed. What, exactly, is a journal or diary? How did these information tools evolve? What information possibilities do they hold?

The History of Diaries

William Matthews, a linguist who began his career using diaries to study linguistic patterns but who ended up a diary scholar, notes:

I once tried to write the history of the diary, only to find that I could produce nothing but chronology. Except for religious diaries and certain literary productions resulting from the reading of Pepys, Amiel, Barbellioin, diaries are mostly written without reference to other diaries and without influence from them, and so the form has no history except in the more general sense (Matthews 1950, ix).

Around the same time that Matthews was compiling an annotated bibliography of British diaries, diary scholar P. A. Spalding was penning a study of diarists. In his work, Spalding states that "Because of its strictly individual limitations there can be no history of diary-writing as there is a history of the drama or the novel (Spalding 1949, 64)."

What Matthews and Spalding are alluding to is that the diary is a personal writing form created more for writer than for reader. As such, its form generally adheres more closely to the writer's specific needs than to formal tradition. Another point is that because diaries tend to be personal documents not often shared with others, it would be difficult for a formal tradition to even form. Nevertheless, diarists' needs and goals are at least somewhat subject to cultural conditions and fluctuations. Also, journals are not a completely private genre. Not only have some journals been created as shared documents, but diaries have been published for centuries and diarists may have patterned their writing either after these published journals or after the writing of someone they knew personally. While an exact history or formal tradition may not be

traceable or may not even exist, trends or patterns in diary-keeping may be noted and even labeled as traditions.

It was earlier shown that the two most commonly used terms, *journal* and *diary*, indicate what can be seen as differing viewpoints about what such writing is or should be. One reflection of this difference is to note that diaries and journals may have evolved from different traditions or at least have been patterned due to expectations arising from different origins. English professor and researcher Rebecca Steinitz makes note of these traditions and origins in the Anglo-American sphere. In particular, Steinitz finds evidence of a split between diary content consisting of primarily objective information and content welcoming the subjective. The first type of diary is mainly a simple chronological record of daily events or conditions, primarily intended as a memory stimulant. The second kind of diary, the more subjective form, includes "the expression of a personality" and includes commentary from "the world of the self" as well as "the world outside (Steinitz 1997, 45)." According to Steinitz, the two kinds of diaries emerge from two distinct sources historically, at least in Anglo-American culture:

The first, which one might call diaries devoted to the preservation of experience, developed out of early traveler's records and continued in a wide range of military, political, travel, and personal accounts over the ensuing centuries. The second...can be called diaries of self-expression, derived from the self-reflecting Puritan, Methodist, and Quaker diaries of the seventeenth and eighteenth centuries, gaining new impetus from the late nineteenth-century translations of the self-obsessed Continental diaries of Henri-Frederic Amiel (1885) and Marie Bashkirtseff (1889), and have blossomed in the twentieth century under the influence of Freud, Nin, and such instructional texts as *The New Diary: How to Use a Journal for Self Guidance and Expanded Creativity*

(Rainer, 1978) and *The Creative Journal: The Art of Finding Yourself* (Cappacchione, 1989). Certainly these two kinds of diary have, since at least the eighteenth century, when secular diaries of daily life began to proliferate in both England and the United States, tended more often to coexist in a single text than not. Nevertheless, critics and historians, while recognizing the validity of both and acknowledging that most diaries are shaped by the intertwining of a writer's subjectivity and his or her depiction of the outside world, have tended to wax evaluative in their assessments of the relative merits of each type of diary (Ibid. 1997, 45-46).

Most researchers and diary scholars tend to focus on the second form of journals, a type of personal writing that may include factual and objective information but that not only combines this type of information with the subjective but shows a preference for the subjective. Spalding even states that a "genuine diary" should be "that dialogue of the self with the self (1949, 12)." Of this type of journal, Spalding notes "The history of diary-writing, in so far as it exists, is that of the development of self-awareness (Ibid., 63)." Continuing along this line of thought, he writes:

We can only indicate, here a general trend, as in the awakening of self-consciousness at the turn of the sixteenth century; there, as in Montaigne, a specific influence. We can say only that this impulse to spontaneous self-expression, beginning in the seventeenth century, reaches its zenith in the eighteenth, the great age of toleration for the individual and the eccentric; and declines again, slowly but surely, throughout the nineteenth, under the sedative influence, this time, not of a universal Church and a common culture, but of a social uniformity based on compulsory education and the Machine (Spalding 1949, 64).

Diary scholar Arthur Ponsonby, who traces the earliest diaries in England to the sixteenth century, observes a similar pattern of growth in self-consciousness. Ponsonby, however, notes constant growth rather than a

nineteenth century decline and connects the use of diaries firmly with this growth in self-consciousness.

The idea of writing down daily thoughts and notes on passing events, especially when it takes a more or less introspective form, is of comparatively modern growth, and would seem to be the outcome of the increasing self-consciousness which intellectual development has produced in humanity. It is a result of psychological evolution, of expanding self-knowledge and subtler powers of analysis. As the centuries pass, the diary-habit seems to gain ground and will probably assume more generally an introspective form (Ponsonby 1923, 8).

Whereas diaries in the Anglo-American sphere cannot be comfortably traced back before sixteenth century, other traditions may have begun much earlier. In other cultures where some evidence of personal records exist, the split between objective and subjective can still be seen. A collection or repository of observations was used in Greek and Roman rhetorical education which in many ways reflected modern journals, at least that form called commonplace books, more than modern textbooks due to their eclectic and relatively subjective nature (Cothem 1991).

In the East, diaries have been used for centuries. Japanese culture in particular values the journal with diaries kept by statesmen and Buddhist priests preserved from the ninth century A.D. These early diaries, written in classic Chinese, contain mostly reports on the weather. They included some events from the diarist's life, but very little information is of a personal or subjective nature (Keene 1989, 17). The oldest surviving diary in the Japanese language is *Tosa Nikki* (*The Tosa Diary*) by Ki No Tsurayuki which records some of the events of a journey made in the years A.D. 934 and 935 to the province of Tosa

(Ibid). A few decades later, there is evidence that Japanese women of the court kept "pillow books," small diaries tucked in their pillows that were writings about their thoughts and feelings, the subjective, more than about facts and the objective (Johnson 1997). One of the more famous is an account by Sei Shonagon, a lady-in-waiting to the reigning empress in the last decade of the tenth century that contains lists of the diarist's favorite and least favorite things, accounts of trips, and descriptions of court life. Unlike earlier diaries, it is highly subjective, unapologetically full of the writer's opinions. Regardless of the nature of their content, diaries in Japan have enjoyed and continue to enjoy a greater degree of respect than in the West (Keene 1989, Rainer 1978, Shapiro 1989). Diary scholar Tristine Rainer notes "Whereas in Japan the earliest diaries shine brightly as part of a literary Golden Age, a period of peace, prosperity, and cultural sophistication, in medieval Europe and England the roots of the diary are buried in mystery and magic (Rainer 1978, 20)."

Rainer observes that in earlier times in the West, diaries may have been associated with written accounts kept by "witches," attempts by individuals wishing to preserve rites and lore outside of the Christian spiritual and intellectual realm. She notes that these beginnings may account for the "taboo" of silence and secrecy associated with diaries in the Western tradition (Ibid). Part of this may also have been the fact that the ability to read and write was rare during these early times, the idea of words and ideas being preserved on paper may have taken on a magical quality in itself, particularly to those who could only wonder what was being inscribed. This scarcity of literate individuals

as well as the rarity and expense of writing materials may have been one of the factors that influenced integration between the objective and the subjective, the record book and the personal account. Spalding notes that the faint beginnings of diaries may be with medieval scribes who made use of rare paper and their ability to write by adding notes to the margins of their work, knowing that their writing would be read by very few. He quotes the transcribed marginalia of an early Irish scribe as recorded in *On the Colophons and Marginalia of the Irish Scribes* by Charles Plummer [Proceedings of the British Academy, 1926]:

It is the Friday before Christmas to-day, and it is pouring heavily now at the beginning of night...I am very cold without fire or covering...the robin is singing gloriously, but though its red breast is beautiful, I am all alone...I am grieved for the tidings which I hear even now, that my mother and sister have died in Spain (Spalding 1949, 27).

Early scribes occasionally did use available paper to record bits and pieces of their personal lives. Other early writing may have followed this pattern of official or objective writing with the personal and subjective creeping in from time to time. Diary scholar Harriet Blodgett notes that the woman taking care of a household in years past sometimes did not prevented herself from "turning her household accounts ledger into extra space for words about her personal interest (1991, 25)." Still, other journals remained primarily objective:

The earliest travel diaries were kept less for reasons of sentiment than geography. If you were exploring someplace nobody else had been to, you'd better be able to tell your sovereign how you got there. A diary would be the richest supplement to any maps drawn along the way; indeed the ship's log -- like the household account and the commonplace book -- is one of the forms to which the diary probably owes its murky start. (Mallon 1995, 43).

Another tradition, as opposed to writings that may have had their origins in the log or account book, is the diary that was created almost solely for the subjective, yet in a oftentimes rigid and disciplined format. Those individuals of the Puritan religions began using diaries to examine their inner lives and chart their spiritual growth (Blodgett 1991, Mallon 1995, Rainer 1978). Mallon notes that there is evidence that Reformed clergymen in East Anglia as early as the sixteenth century used diaries as a means to examine their inner lives, primarily their consciences, and prepare themselves for worship. The East Anglicans, who had to meet secretly due to political pressure against them, sometimes exchanged their diaries to teach and encourage each other, yet these documents had to be hidden from the outside world due to religious persecution (Ibid). This idea of the journal as a shared rather than private text, one created mainly for use by a small group rather than the individual writer alone, was to continue in other places and times (Blodgett 1991, Mallon 1995, Rainer 1978, Steinitz 1997).

Interestingly enough, even the subjective journal didn't always remain purely subjective. The earliest surviving diary in English is believed to be that of Lady Margaret Hoby. Blodgett remarks that Hoby, "an English Puritan of the landed gentry who was endlessly busy with estate chores, began her record keeping in 1599 for religious self-examination but then strayed into keeping a daily record of whatever seemed significant to her at the moment (Blodgett 1991, 24)." Blodgett observes that Lady Hoby "faithfully recorded all her activities but, penitence aside, almost none of her feelings (Ibid)."

The diary as a document integrating or at least somewhat blending the objective and subjective occurred later. Diary scholar Thomas Mallon notes that in the Anglo-American sphere, "The idea of the diary as a carrier of the private, the everyday, the intriguing, the sordid, the sublime, the boring -- in short, a chronicle of everything -- seems to have occurred accidentally, and not much before Samuel Pepys began what may still be the best known diary of all (Mallon 1995, 1)." Mallon is referring to Samuel Pepys, considered by some to be the father of diarists, who kept a diary from 1660 to 1669 about subjects ranging from his work in the British Navy Office to the coronation of Charles II to his attempts at seducing various women in the dark days of the plague (Hailey 1986). Pepys' diary was donated to Magdalene College at Cambridge and remained there unread for almost 150 years due to the fact that Pepys had written his diary in a cipher of his own creation (Steinitz 1997). Although Pepys' diary remained in obscurity for so many years after his death, his work has had an overall impact similar to the impact Anne Frank's diary has had on the twentieth century. Spalding remarks, "In any discussion of English diaries the name of Pepys will be as frequently invoked as that of Shakespeare when the topic is literature in general (Spalding 1949, 9)."

The Diary in the Nineteenth Century

In the United States, diary writing was embraced as a democratic form available to anyone and everyone, provided they could write. In the introduction

to *The Book of American Diaries*, Randall M. Miller and Linda Patterson Miller state this, in effect connecting the ideas of democracy and literacy:

Nowhere else in the world has diary writing been so widespread among the "common folk" as in the United States. Increasing literacy in the nineteenth century allowed many different classes of Americans to write -- and to read -- journals so that diaries became a popular literary form...(Miller and Miller 1995, xviii).

In the eighteenth century, both in America and the Old World, travel diaries and religious diaries were in fashion (Blodgett 1991). Letter-diaries became popular, blurring the lines between these two forms of personal writing. Individuals wrote daily letters to family and friends, particularly during travel or to share religious concerns, then kept copies of these letters as a unified collection. These traditions continued, especially in America during the nineteenth century.

The Civil War and westward expansion, along with rising literacy rates and greater availability of writing materials, accounted for an increase in American diaries. Miller and Miller note that, like the increased interest in diaries noted with World War II prisoners earlier in this chapter, the Civil War increased introspection and the need for expanded self-knowledge.

During the Civil War especially the diary rivaled the Bible as the book a soldier likely would stuff in his haversack or backpack. Young men and women facing death began to think about life. In war their lives suddenly assumed meaning as part of history in the making, just as imminence of death demanded that some record of their individual lives be left behind. The diary was a way of staying alive. It might even save its author's life, as in the case of at least one Civil War soldier whose diary, which is now on permanent display at the National Museum of Health and Medicine in Washington, stopped a bullet from piercing his chest (Miller and Miller 1995, xvii).

Spalding also notes that in war and other times of great upheaval, "This uncertainty makes life as such more valuable, and therefore the more worthy of record (Spalding 1949, 43)." Ponsonby similarly remarks, "If a census of diary keepers could be made it would probably be found that divines and soldiers headed the list. Many a man in war time will keep a diary though he has never done so before and does not do so again (Ponsonby 1923, 21)."

Westward migration also increased diary use. Around eight hundred pioneers' journals have survived in various archives, but many more must have vanished or are in the hands of private collectors (Mallon 1995). According to Lillian Schlissel, the editor of *Women's Diaries of the Westward Journey* [NY: Schocken, 1982], most American pioneer diaries are objective in nature (Ibid). The journals served mainly to record travel and domestic details such as mileage, ration amounts, weather, and whether or not there was enough grass along the route for livestock. These diaries most often served as surrogates for letters that could not be mailed along the way or books of information to be shared with friends, family, and subsequent travelers at the journey's end, but they also sometimes served to hold expressions of the subjective, often the need for comfort or the expression of tears (Blodgett 1991, Mallon 1995). These records seem to have been kept more often by women than men, with American pioneer women creating a "network of correspondence and mutual support" as well as relying on the diary to "preserve their history and culture (Rainer 1978, 20)." This tradition may have originated during the nineteenth century when many diaries in Britain and America were often intended for the

use of a family (or other group) "with women serving as domestic secretaries who chronicled family doings for all to know (Blodgett 1991, 25)." The diary tradition that slowly began to form around these ideas, around the woman as a pioneer exploring or living in largely unsettled places and using the diary as a tool to conquer this new life, has been explored by historian Gayle Davis. Her ideas will be explored later in the thesis.

Mallon notes that the Victorian era, 1837 to 1901, is sometimes known as "the diary's heyday" (Daly 1985). England's Queen Victoria was a prolific diarist and her enthusiasm may have encouraged many to begin keeping journals, particularly females, with this tradition carrying over deep into the twentieth century. Miller and Miller note:

Chapbook diaries sold steadily to men and women on the go during the nineteenth century. Only over time did diary-keeping come to be seen as a "feminine" habit. Beginning in the late nineteenth century, young girls received embroidered, lockable diaries as Christmas gifts, almost as a rite of passage into literate girlhood and a private life. Boys growing out of their knee britches rarely got such presents. Even today, pocket diaries designed for girls are ready fare at stationary stores, and girls remain the single largest market for the five million plus blank diaries sold each year in America (Miller and Miller 1995, xix).

The Diary in the Twentieth Century

In the twentieth century, the diary as a more objective form full of dates, figures, and minimal emotive description did not vanish, but it has waned. In part, it may have changed form as more pre-prepared materials became available. What had once been considered a diary not just because of content

but also because it was kept in a blank journal book may now take a form more readily labeled as a calendar, notebook, or personal organizer such as a Filofax (Blodgett 1991). Although perhaps more difficult to label, these records still contain personal information, although in this case "personal" means that the record is relevant to the specific life of the person keeping it rather than reflective of their inner life. As repositories of personal information, more objective diaries will be explored further in the portion of the thesis dealing with diaries as products and information objects.

Ponsonby and Spalding noted that the history of diaries is related to the growth of self-awareness, self-consciousness, and the need for self-knowledge. This is especially true of the twentieth century where psychology as a field and society as a whole experienced changes due to such influences as Sigmund Freud, Carl Jung, and Gestalt theory. Previously, the diary had come mainly from two traditions. Although objective and subjective were often blended, usually one type of information or the other remained prevalent. On the one hand, a diary might have once recorded information of a more physical nature and allied itself closely with ships' log and account books. On the other hand, a diary might have recorded information of a more spiritual nature and allied itself closely with Puritans' explorations of the soul. In the twentieth century, the mental became increasingly important in the journal; the subjective gained ground, but not as concerned with religion and conscience. Psychology's increased emphasis on the experiences of individuals and how they affect the

mind and personality helped to meld the inner searching of the Puritan diary with an attention to the diarist's daily experiences and observations.

Another aspect that changed the nature of many diaries was that society itself changed and evolved. Not only did hemlines rise in the twentieth century, but, as time passed, topics that were once considered taboo were to become mainstream. Spalding comments, "It was not until after the 1914-1918 war that increased freedom of speech and a new interest in social and psychological minutiae permitted and encouraged the publication of diaries hitherto unknown or buried in the files of learned societies (Spalding 1949, 73)." It wasn't just the publication of diaries that changed. Many journals themselves changed, with diarists beginning to approach topics and outline ideas that would previously have been almost unthinkable or, at the very least, dangerous to write down on paper where someone else might see.

Tristine Rainer believes that the twentieth century has seen the rise of what she calls the New Diary:

This widespread use of the diary as a tool for personal growth and for realizing creative potential is a phenomenon of the twentieth century. It would not have been possible without modern psychology's recognition of the subconscious, the free experimentation of contemporary art and writing, and the recent popularization of certain psychological insights and concepts of personal responsibility. But thanks to these pervasive cultural changes it is now possible for anyone who can read and write to keep some form of New Diary -- a personal book in which creativity, play, and self-therapy interweave, foster, and complement each other (Rainer 1978, 17).

Of the many changes in the twentieth century, the expanding roles and the empowerment of women has been a large theme. Perhaps encouraged by

past roles as family secretaries with group journals or by the network of support created by women's frontier diaries, women seem to have embraced diaries in the twentieth century to a much greater extent than men (Blodgett 1991, Bowles 1994, Gannett 1992, 1994, Rainer 1978, Shiwy 1996). Furthermore, Gannett, author of *Gender and the Journal: Diaries and Academic Discourse*, notes that because of the diary's perceived alliance to women, these documents have been "traditionally marginalized and devalued" (Gannett 1994, 278). She continues with a exploration of the diary's "stereotypical association of femininity" affecting the social perception of journals to include "triviality, pettiness, subjectivity, and romanticized confessionalism (Ibid)." This has caused journals and diaries to be "like other privatized discourses, common, even necessary, parts of women's lives, but they have rarely been considered important enough to be talked about in the public world of the academy, and they certainly have not been viewed as valuable enough to be studied systematically (Ibid)." Gannett follows this up by adding:

Of course, journals do not contain 'the whole truth and nothing but the truth,' nor are they direct, authentic, and complete representations of the self. But we have begun to explore the power of such texts to record, witness, and illuminate social and personal history, to probe the dynamic ecology of the individual and the social, to construct and reconstruct the 'self' and 'voice,' and to serve as the site for coming to know oneself as a responsible agent in the world (Ibid).

On a similar note, Marlene Shiwy, in her book *A Voice of Her Own: Women and the Journal-Writing Journey*, explains how diaries can further women's goals concerning gender issues, observing that "It can provide a safe

channel of thinking and creating one's life beyond the boundaries and terms that society deems appropriate to female selfhood and behavior in a given historical epoch (Shiwy 1996, 235)." As a process, the journal can help women (and men) explore not only self-knowledge, but how their self-knowledge relates to the mores of society past, present, and future. Shiwy continues, observing how the a diary can be useful in these areas as an information object:

It may also serve as a mirror that reflects the radical discrepancies between the 'truths' of the public realm (for 'truths,' read the prevailing perspectives of those who hold power) and the actual daily experience of everyone else...As Louise DeSalvo says in her study of Virginia Woolf: 'In its most radical manifestation, a diary is a potential historical time bomb; it lies in waiting until it explodes misapprehensions about the past, misconceptions about the role of women or other outsider groups in history, misrepresentations about how a particular life was lived (Ibid., [DeSalvo, Louise. *Virginia Woolf: The Impact of Childhood Sexual Abuse on Her Life and Work*. Boston: Beacon Press, 1989]).

Incidentally, it is interesting to note that *Tosa Nikki*, the oldest surviving diary in the Japanese language, contains what has been proved as a false statement in the front of the diary. The author pretends to be a woman. One explanation offered for this is that the author felt that writing as a woman allowed him to use his native language rather than classic Chinese. Another explanation offered is that it allowed him greater freedom to express his feelings should the writing be read by others (Keene 1989).

Continuing to follow a chronology of diaries, it can be noted that the idea of the diary as a primarily feminine pursuit, one that often reflected a growing

interest in psychology and, particularly, mental therapy, continued strongly until the 1960s. Tristine Rainer notes that the idea of the diary as belonging to the female realm "was particularly the attitude in the United States in the early 1950's, when there was widespread merchandising of one-year diaries with toy locks and keys designed for young girls (Rainer 1978, 21)." She comments on how this view of women and diaries fit into the twentieth century evolution of journals:

These diaries parodied the long tradition of women's secret diaries. They also represented the tail end of the Puritan tradition of diary keeping as a self-watching, daily discipline. These little calendar diaries were as relevant to the needs of the twentieth century as lace pantaloons were to piano legs. But they had a visibility that the New Diary -- which had, in fact, been developing throughout the twentieth century -- still lacked (Ibid).

The New Diary, as described by Rainer, "encourages total freedom of expression" and helps to develop creative faculties (Rainer 1978, 11, 13). It may come across as something of a gimmick to refer to the New Diary with capital letters, especially when changes did not occur sharply (Rainer acknowledges an evolution), when more traditional diaries are still plentiful, and when there were previous diarists who had long ago been producing a type of personal writing that may seem, in retrospect, more at home in today's world than in the past. Nevertheless, many diarists are now overcoming stereotypes about a diary should or should not be, exploring the use of not just prose, but also poetry, lists, unsent letters, and dialogues. Where journals were usually considered completely verbal, diaries are now more often merged with artist's

and naturalist's sketchbooks and the inclusion of found objects shows a willingness to merge diaries with scrapbooks or commonplace books.

Rainer outlines the New Diary as "an active, purposeful communication with the self (Rainer 1978, 17)." She puts forth that it is a place to record whatever immediate feelings, thoughts, interests, and intuitions are dictated by the diarist. The purpose of the New Diary is to create a book of one kind or another that contains a "unique, unrepeatable story of the self (Ibid)." This book enables the diarist as a writer and as a reader to reflect upon the past and discover unrecognized parts of the personality and allow the detection of patterns of meaning in the writing and, therefore, in their lives (Rainer 1978, 17)."

This new concept of journal writing has little to do with the rigid, daily calendar diary you may have kept as a child, nor the factual travel journal you may have written to recall the Grand Canyon or Notre Dame as you sat by the fire in later years. It has little to do with outdated notions and misconceptions of diary keeping as self-discipline, a dutiful record of events, a narcissistic self-absorption, an escape from reality, or a nostalgic adherence to the past. Instead, the New Diary is a practical psychological tool that enables you to express feelings without inhibition, recognize and alter self-defeating habits of mind, and come to know and accept that self which is you. It is a sanctuary where all the disparate elements of life -- feelings, thoughts, dreams, hopes, fears, fantasies, practicalities, worries, facts, and intuitions -- can merge to give you a sense of wholeness and coherence. It can help you understand your past, discover joy in the present, and create your own future (Rainer 1978, 18).

Rainer attributes great influence to diarist Anais Nin, a novelist and painter who published seven much-condensed volumes of her journal in the 1960s and 1970s, while she was still living. Nin, embracing a search for self, creativity, and awareness, became one of the most famous and influential diarists of modern times as well as something of a cult figure (Hailey 1986, Mallon 1995,

Schiwy 1996). A follower of psychotherapist Otto Rank and an author of erotic literature, Nin advocated the search to root out falsity and raise awareness within the self. In her journals, Nin states, "I had to find one place of truth, one dialogue without falsity. This is the role of the diary (Gordon 1994)." She stated, "We write to create a world in which we can live, to heighten our awareness of life, to lure and enchant and console others, to serenade our loves...and to transcend our life (Raphael 1987, 30)." Nin also often used her journal as a place to vent, a place to "let out my demons (Johnson 1997, 9)." While some might label Nin's diary emotional exhibitionism, a great many others found its liberation inspiring.

Rainer is correct that there is a New Diary, a general evolution of form that has become a force in twentieth century journals. However, two other influences have also affected contemporary journal writing. One of these influences is psychologist Ira Progoff who has been conducting what he called "Intensive Journal Workshops" since 1966 (Mallon 1995, Schiwy 1996). In 1975, his book *At a Journal Workshop* was published in support of his workshop premises, a source often referred to in literature about diaries. While Progoff seems to agree with Nin and Rainer that the diary is a knowledge tool with great power, freedom of form and creativity of expression seems less important for him. Progoff's methods rely on a specific method for writing in the journal and workshop participants are issued workbooks with multicolored sections designed for specific purposes. Entries are not made by whim, but instead writing is preferred to correspond to certain times of the day and content

to correspond to certain spheres or periods in the diarist's life. While Rainer's New Diary might be compared to an artist's box full of paints and various materials for self-expression, Progroff's journal can more comfortably be compared to a pocket knife, a personal tool that, while it can be used for many jobs, is intended for a few specific uses. Rainer, following the example of Nin, seems to want to push the doors open wide, encouraging writing that is almost self-therapy and that is open-ended and highly-flexible so as to serve the goals, wants, needs, and preferences of the diarist. Rainer's approach is similar to many other diarists and diary guide authors such as Kathleen Adams (1990), Christina Baldwin (1977), Joyce Chapman (1991), Joanna Field (1981), and Marlene Schiwy (1996). However, Progroff, too, is not alone with his more structured course-like approach. The popular 1992 book by Julia Cameron, *The Artist's Way: A Spiritual Path to Higher Creativity*, relies heavily on journals and stresses creativity as a goal, yet the book takes followers on a carefully formed and organized path.

The popularity of Progroff and Cameron's structured approach might be dismissed if a second major influence in contemporary journals was not present. Also advocating some kind of structure in most cases is the increasingly popular academic journal, which has been used in classroom from kindergarten through college levels (Cooper and Dunlap 1989). In the 1960's, journals as tools for learning came to be recommend with greater and greater frequency in schools (Cothorn 1991, Gannett 1994). Later, in the 1970s, composition theorist Peter Elbow helped journals gain additional popularity by

encouraging teachers to worry less about topic sentences and outlines, more about helping students to enjoy writing and find their “voices” as writers (Cooper and Dunlap 1989, Hodges 1991). While journals are usually allowed much greater freedom than other types of writing in schools, particularly in terms of writing style and grammar, content is usually expected to at least touch on given topics. Most often, students are asked to write about current events or course content.

Toby Fulwiler, one of the strongest advocates for journals in school settings, notes that journals can be used across the curriculum, not just in English classes or other studies in the humanities. His 1980 article “Journals Across the Disciplines” as well as the collection of essays he edited in 1987, *The Journal Book*, both explore how connecting students’ subjective and objective thoughts as well as personal and school-related ideas can strengthen the learning experience and bring understanding both to students and teachers. He notes that journals help to individualize instruction and make it harder for student to remain passive, uninterested. These ideas are closely related to findings by Hughes et al (1997), James Britton (1978), Belenky et al (1986), and many others. Part of these benefits are due to the use of expressive language, which will be explored later in the thesis. The main benefit, however, may be that knowledge construction and sense-making can take place not just in one area of a student’s life, but instead journals allow integration of all experience, internal and external, personal and academic, subjective and objective.

Fulwiler states:

I describe journals to my class by explaining that journals exist somewhere on a continuum between diaries and class notebooks: whereas diaries are records of personal thoughts and experiences, class notebooks are records of other people's facts and ideas. Like the diary, the journal is written in the first person; like the class notebook, the journal focuses on academic subjects the writer would like to learn more about. Journals may be focused narrowly, on the content of one discipline, or broadly, on the whole range of a person's experience. Each journal entry is a deliberate exercise in expansion: 'How accurately can I describe or explain this idea? How far can I take it?' The journal demands the student expand their awareness of what is happening, personally and academically, to them (Fulwiler 1980, 17).

How journals are assigned to students and what experiences those students will have with this type of writing will vary greatly with every school, each grade level, and every teacher. In addition, not every student since the 1960s have experienced or will experience writing in journals in a classroom setting. It is likely, however, that the majority of students now in school will come across this type of learning at some time in their academic careers. This may have a large impact on the number of diaries used in the future and how they are used. Although the academic form of journals will probably be somewhat structured and will be created at least in part for an audience, a teacher and sometimes other students as well, many of today's youth are learning to process information on paper and to address both the subjective and the more objective, the private and the academic/professional. Students who come to trust and even enjoy this type of information processing may take it outside the classroom to any or all areas of their lives. In addition, they may balance the school-based structure in journal writing and with the freedom

encouraged by Rainer and her colleagues, changing trends in diaries further and helping traditions to evolve further.

To finish our chronological study of diaries, the 1980s marked an escalation in publishing writers' diaries, notes diarist and author of *The Hidden Writer: Diaries and the Creative Life*, Alexandra Johnson (1997). She states, "Once the literature of the outsider, by the 1980s the diary was becoming mainstream (Ibid., 10)." Perhaps Ponsonby pointed to the beginning of this trend decades before when he stated "One reason, and not the least important, for the appeal of diaries is the comforting sense they bring of unique, not to say eccentric, lives lived long ago, in contrast with the machine-turned lives of today (Spalding 1949, 74)." In the 1990s, the desire for immortality or posterity seems to be more of the theme, but one that has been reconsidered somewhat after 1994. This year marked the publication of the diaries of political leader Bob Haldeman, exposing details of President Richard Nixon's administrative life and eventual resignation over the Watergate scandal twenty years before. It was also the year Senator Bob Packwood found that his diary full of sexual escapades could be used as legal evidence against him in a misconduct case. Packwood's experiences were somewhat duplicated that same year when Deputy Treasury Secretary Roger Altman and Treasury's Chief of Staff Joshua Steiner found their diaries used in the government's Whitewater investigations (Borger 1994). Two years later, the journals of Theodore J. Kaczynski are taken as evidence by police and are discovered to admit to the criminal acts of

the Unabomber (Claiborne 1996). This century Nin may have been a major influence on getting individuals to "open up" in their journals, but legal action in the last decade of the century may very well have its own effect on present and future diarists.

What Information Possibilities Do Journals Hold?

Earlier in the thesis, it was discussed that the thesis interviewees labeled their work by different names, four out of five preferring the term *journal*. The fifth interviewee, David, chose a different term altogether for his writing:

I think I call it 'notebook,' like a lab notebook. I think of it sort of in that way. The reason I think about it that way...jumping ahead, I guess...is because I started doing it when I worked at [a laboratory]. Most of the scientists around there carry lab notebooks of their experiments and their work, so I just think of mine the same way. But I think when I really started doing it religiously every day, it was after I left the labs and became president of a foundation. Then I found it really important both from a personal standpoint and professionally, to keep track of everything that I was doing.

The name and the origin of his writing closely followed his needs. In a new job, David found himself needing to keep various elements organized and separated:

...I was new to that kind of thing where you have lots of different projects all going simultaneously. And I happened to have two projects at the same time which involved sponsors that were located in Philadelphia. A plane ticket was delivered to my office to Philadelphia and I couldn't remember for the life of me which one of the sponsors wanted me in Philadelphia at that time. I realized I didn't have a good record-keeping system. So I started carrying a calendar like this that you could write notes in. [He holds up a pocket calendar]

From a calendar, David then added the use of a shingled card system, a binder containing cards for notes that can be rearranged from one slot to the next as tasks are reorganized or completed. Later, when beginning work at the lab, David noticed the scientists with their notebooks. This format would allow for entries to be stored permanently in chronological order like the calendar, but also allow more room for notes like the cards. The decision to change to a more traditional diary system also had another advantage. Of the shingled card system, David stated:

If you open this up on an airplane and start shuffling cards, people start looking at you wondering what's going on. But nobody pays any attention to you if you're writing in a notebook. Less obtrusive. And, also, in a meeting. If you use [the shingled card notebook] in a meeting, why, it distracts people. But just opening a journal...I don't know if this is more than you want to know, but I used this at [important] meetings when I was [in a high level position]. By the time I left at least four or five other [leaders] were using this, partly because they wanted to keep track of what was being said in those meetings and didn't misunderstand or they could go back later and say, "Hey, we talked about this three weeks ago." Helped jog their memory. It is sort of catching, when you see other people doing it. It can be infectious.

For handling personal information involving his profession, David moved from having no personal information system to a minimal system (the calendar), to a divided system (calendar and shingled cards), then to a more traditional diary, his notebook. All these methods of recording and processing personal information are related (and within the interest of this thesis), yet the form and process changed over time to fit the information user's needs. David's current notebook, for example, is kept in a standardized format, each volume in an identical bound book with flexible cardboard covers and pages containing grid

paper. Because these specific books suit David's needs well, he purchases them in quantity to assure additional volumes in the future. The size allows it to be portable yet is easy to write in and the graph-style paper makes it easier to include drawings or diagrams. The size also allows for the inclusion of a folded standard sheet of paper. On occasion, David will tape additional pages into the notebook, usually a letter or a printed e-mail message containing information relevant to the content of the notebook.

In addition to the forms mentioned above, David keeps or had kept other diary volumes. Several volumes were in school composition books. During the interview, David opened one of these to show the content and found several short stories, some finished and others unfinished, as well as newspaper clippings, and a list of "phrases that my mother used to use that drove me crazy but that now I think about fondly when I recall her." Still another volume was in a blank journal book with an aesthetically-pleasing cover and was written just before and just after he decided to leave a former workplace. This journal volume he described as "emotional," "personal," and "introspective" and it was kept in a separate volume so that he could carry his professional notebook around with him, leaving the more deeply personal one at home.

Elizabeth's journal has also seen a great number of changes, beginning with a "pre-bound book that said 'Journal' on it" and now primarily existing on word-processed eight and a half by eleven inch paper collected in a three-ring binder. Elizabeth stated in her interview that color was important to her, which found her way into her journal in the form of decorated stationery designed for

computer printers and, if writing by hand, colored pens that provide "a sensual experience." Of her current methods, Elizabeth stated:

Since I got a computer about five years ago, I've been keeping it pretty much strictly on computer. And when I'm traveling, I'll do it by pen. I never use pencil. That's my preferred way because my typing skills have gotten to the point where my hands can keep up with my thought patterns much more quickly than writing by hand does.

The loose-leaf format allows Elizabeth to use the computer for writing, a way of not only improving her writing speed but also of having a backup copy of her journal on computer disk. In addition, text can be imported and exported from computer files for various uses. Parts of the journal can be cut and pasted to other files for use in writing projects such as letters or essays and she reported occasionally downloading text such as news articles for inclusion in a journal entry. Another advantage of the loose-leaf and binder format that Elizabeth reported was being able to save meaningful paper items along with her journal. Magazine or newspaper articles, letters to or from family and friends, and programs from events can be punched with holes and added to her journal. She also places a large envelope at the front of each binder as a collection place for scrapbook-type materials. "They don't really get included in the journal, but they are annotated to sort of go along with things in my journal." Some of these materials contain information in their own right, such as a theatre program full of information about the production she has attended or a magazine article that relates to something in her life. Other items may not

provide any information clues on their own. When asked why she includes the latter, Elizabeth stated:

As mementos, physical reminders so I can take them out and finger them, let the memory come back. And sometimes they don't necessarily get discussed much in my journal. They might be things that I'll rely on the item itself to invoke a memory. That's pretty much what it's for, it's the scrapbook-type effect more than anything.

Penelope, like Elizabeth, keeps her journal loose-leaf format:

I bought a beautiful leather diary...it was really pretty...with one of those stiff-backed notebooks that fits inside the cover that you can replace. And it thought it would just inspire me to write. But the book was too stiff. The thing is too stiff; I'm not comfortable with holding it open. So I found this nice, smallish...smaller than eight and a half by eleven...loose leaf paper that I really like because it's easy to carry if I need to. I just like it a lot, and that's what I prefer if I'm not doing it on the computer. But I sometimes do it on the computer.

Alexandra and Jaclyn both reported keeping to basically the same format of their journals over time, always in pre-bound blank journal books and always handwritten. Alexandra, however, reported that a friend had recently shared her own ways of keeping a journal and that this interaction inspired changes in her own methods:

I had a friend who encouraged me to keep a travel journal when I took a big trip this summer. And since then I've been pasting things in, receipts and things like that...And I have to say that I enjoy my journal a whole lot more. There are times when I don't feel like writing a lot about something, but I can stick in a postcard or a piece of paper like a movie stub, just add a little blurb, and I know looking back at that I'll have that caption to remind me.

Variance in Physical Journal Forms and Techniques

As seen with the diarists interviewed, a diary can take forms quite different from stereotypes that exist about what a journal can or should be. A diary can mold itself to the need of the diarist, both in physical form and technique, writing style and type, and in content. In physical form, a diary may be kept bound or unbound, on lined or unlined paper, by computer or by hand, and by any writing utensil. Journal scholar Educator Toby Fulwiler suggests that his students use a loose-leaf format so they can remove any entries that they decide they don't want to share with the teacher. He notes that another educator, a science teacher, recommends a bound book due to copyright concerns (Fulwiler 1980). Record-holding diarist Edward Robb Ellis began his journal in composition notebooks, then shifted to loose-leaf pages that he then had bound and titled ("Briefly I Tarry"). Later, he shifted again to unbound loose-leaf pages sorted in boxes by year.

Ellis' technique was to write his entries longhand in a formatted diary notebook during the day, reworking his notes the next morning and typing them up on a manual typewriter (Mantell 1995). Diarist and naturalist Jeff Rennie often takes his diary on hikes and camping trips. To fit his needs, he uses a two-step method similar to Ellis' which includes "a pocket-sized notebook that stays handily in my shirt-pocket or fanny pack so I can jot down random thoughts, like the direction of the wind, or the way my mind drifts on long uphill stretches when I am trying to think of anything but the steep trail (Rennie 1996, 29)." Rennie later uses his collected notes to later compose a longer

journal entry in a larger volume carried in his backpack. Kansas pioneer Sarah Ella Miner Blume kept her personal information records in three volumes (all of which hold at least traces of the subjective): a personal journal, a family history and weather record, and an income accounts book.

A diarist will sometimes even resort to writing on any scrap available such as the backs of envelopes or the edges of a newspaper (Gordon 1994, Pellegrino 1992). What writer Sheila Bender refers to as her journal is a box of miscellaneous entries recorded on whatever scraps she finds at hand from bank deposit slips to napkins to other people's business cards (Bender 1997). On August 18, 1858, now-famous diarist Henry David Thoreau forgot to bring his notebook on his walk and so stripped off some birch bark to write on instead, noting "The writer who postpones the recording of his thoughts uses an iron which has cooled to burn a hole with (Mallon 1995, 79)." In the words of Sheila Bender, editor of *The Writer's Journal: 40 Contemporary Writers and Their Journals*, "even what does not look like a journaling process actually can be one (Bender 1997, xiv)."

Variance in Recording Style, Type, and Structure

The writing type or means of recording information can also vary. Cognitive pluralism is the existence of various systems or codes used in thought such as verbal or visual elements (John-Steiner 1997, xvi). Diarists can include elements in their journals that bend to their preferred mode of thinking

or to the symbol system that will work best for a particular entry. Journal entries can also vary in structure.

Diarist, author, and workshop leader Tristine Rainer suggests that diarists make lists, compose "portraits" or purely descriptive entries, write from an altered point of view such as using third-person language, draft never-to-be sent letters, and create imagined dialogues with people or even objects (Rainer 1978). As with Anne Frank, composing a "letter" is popular with many diarists. Journal scholar Marlene Schiwy notes "Because letter writing is so conducive to intimacy, some diarists write their entire journals as series of letters to a real or imaginary friend who serves as an empathetic witness to their lives (Schiwy 1996, 76)."

Some means of recording information embraces articulation using the visual and symbolic as well as the verbal and literal. A 1998 article from the *Boston Herald* reported on the diary Sarah "Sally" Goell Putnam. Kept for 52 years, from the time she was nine years old in 1860 until her death at the age of 61, she filled her journal not only with words, but also with pen-and-ink drawings, watercolors, photographs, postcards, newspaper clippings, play programs, and even cloth swatches. Naturalist Hannah Hinchman points out that many well-known naturalists such as Henry David Thoreau, John Muir, and Gilbert White were journal keepers. "They all discovered a simple but highly effective tool for deepening perception: keeping records of what they observed -- written, drawn, or both (Hinchman 1986, 134)." The visual element, as was witnessed in the case of Alexandra, is especially prevalent in travel journals. In

an article for *Writer's Digest*, travel writer and diarist L. Peat O'Neil notes, "There are writers who need just a word to remind them of an experience. Others save things that are encoded with travel memories, such as local newspapers, postcards, souvenir programs, sales receipts, tickets, even bus transfers (O'Neil 1996). Washington Post writer William Powers makes a point of bringing home such items from his travels, desiring an object "that reminds me of everything I wanted to say (Ibid.)"

Variance in Journal Content

Perhaps nothing about a journal varies or conforms to the writer's needs as closely as the content itself. Sometimes the journal becomes an extremely eclectic document (as was indicated with writing style and type). Blodgett, examining the diaries of others, notes that women's frontier diaries were used "to collect poetry, letters, and song lyrics, keep guest lists, sketch floor plans, record gambling losses, and remind themselves of jokes, epitaphs and favorite recipes (Blodgett 1991, 25)." Shiwy reflects on her own diary:

In its pages I have rejoiced, sorrowed, complained, reasoned, raged, argued, celebrated, reflected, and thought out loud. In my journal, I have written about hopes and fears, goals and aspirations, dreams and nightmares. I have also written stories, poems, songs, prayers, outlines of novels, ideas for my two dissertations, dreams, letters (both sent and unsent), every imaginable kind of list -- from Christmas presents given and received to weight gained and lost and regained. I kept special travel journals whenever I took a long trip and recorded my thoughts, my feelings, and my observations of life in exotic places or perhaps, at least equally, of myself in exotic places. I planned one-month goals, one-year, five-year, and ten-year goals (Schiwy 1995, 239).

One view of the diary, which is especially prevalent when encountering the ideas of diarists who are also interested in other types of writing, is that of a storage area. In an article on writer's journals, L. Peat O'Neil states, "At this notebook stage, the writer's eye is like a magpie collecting elements that shine, cramming the journal page with description (O'Neil 96)." Virginia Woolf wrote in *A Writer's Diary*:

What sort of diary should I like mine to be? Something loose knit and yet not slovenly, so elastic that it will embrace anything, solemn, slight or beautiful that comes into my mind. I should like it to resemble some deep old desk, or capacious hold-all, in which one flings a mass of odds and ends...(Bowles 1994, 256).

In an article about diaries, diarist Phyllis Theroux uses a metaphor similar to Woolf's. She states:

Upstairs in my bedroom is a large wooden storage box where I keep materials for I know not what: quilts, wall hangings, aprons, or curtains, as yet unmade. My journal is the intellectual equivalent: storage space for scraps of material that may or may not be usable in the future, but if I had not place to store it, the material would be lost (Theroux 1994, 29).

Other metaphors for the journal see the journal as a place to return for sustenance. Writer and diarist Heidi Vanderbilt states, "My journal has become a pantry of sorts, where I store supplies for later use (Vanderbilt 1990, 17)."

Writer and diarist Phillip Lopate more humorously observes "I was like a squirrel hiding away nuts for an older me who would raid the stash. The fact that I often forgot what I had written there made the occasional tasty morsel all the more pleasing a 'find' years later (Bender 1997, 187)."

A problem with the metaphors used above is that they create the idea that the journal is static, that items stored in the journal are not used again, are not considered or thought about again, until they are later retrieved, reread. This may not always be the case. Chip Scanlan, director of writing programs at Poynter Institute for Media Studies in St. Petersburg, Florida notes, "The journal works like a seed bed. It's a place you can put snatches of dialogue you overhear, ideas for stories, and these things can begin to grow (Boss 1997)." The content of a diary, which comes from the diarist's mind (World 2), now exists in writing and as an information object (World 3), but this does not mean that it no longer still exists in the diarist's consciousness. Instead, it now exists in both forms (World 2 and World 3), one which may change over time (World 2) and the other which can be relied on to remain as it was written (World 3).

At other times or for other diarists, a journal may serve a very narrow purpose. A search for "diary" and "diaries" in a database of popular magazine and newspaper articles as well as a review of professional and academic sources returned evidence of journals being promoted for a variety of interests. Diaries for specific professions, hobbies, and other spheres of life can be a way to record and process information, a means of creating a reference and allowing patterns to be observed in a specific area. One subjective yet specific form was recommended by talk show host Oprah Winfrey during an interview; she keeps a "grateful journal" each day in which she lists sources of joy in her life so as to be more aware of her positive emotions and to gain perspective on her life as a whole (Harris 1998). Another article recommended a similar type

of record, a "happiness calendar (Culhane 1987)." Journals are advocated for businesspeople and administrators, as a means of recalling specific information, keeping track of accomplishments, and venting frustrations (Cady 1990, Cooper and Dunlap 1989, Sorenson 1987). Diaries are often recommended in sports to discover correlation between training methods and performance results (Gordeeva 1996, Henderson 1993, Kita 1989, Lendl 1987, Matheny 1995). Writers both professional and amateur may use diaries to help organize material or practice writing (Abercrombie 1991, Horvitz 1997, Johnson 1997, Johnstone 1994, Keene 1989, O'Neil 1996, Pelligrino 1992, Raphael 1987, Vanderbilt 1990, Yinger 1985). Journals may also be used by naturalists and gardeners (Hinchman 1986, Johnson 1994, Rennie 1996, Simbeck 1996), artists (Kronsky 1985), travelers (Conover 1996, Fineman 1989, Mallon 1995, O'Neil 1996), and even individuals wanting to pay closer attention to aspects of their lives such as relationships or parenting (DeVona 1985, Meyer 1991, Sammons 1997), grief and depression management (Nicola 1992, Pennebaker 1991, Schnatter 1991), and physical health (Murray 1997, Noriyuki 1996, Pennebaker 1991, Porcelli 1987, Sugarman 1996).

An Information Tool

What is being revealed is that a journal or diary is an information tool. Even when considering tools that accomplish physical tasks, however, some tools are relatively specific. For example, there aren't many jobs that can be

accomplished using an electric saw with a wood-cutting blade aside from the purpose for which it was intended. Other tools are less specific. An ice pick, for example, can be used not only to break apart ice, but also to test the doneness of a cake or lift the submerged wick in a wax candle. A journal or diary is an information tool much like the ice pick is a physical tool, usable for a specific, consistent, and narrow purpose, or for a wide variety of uses. These uses, as well as the benefits received from using this tool, vary from diarist to diarist, but also sometimes from volume to volume, entry to entry, or even moment by moment during the writing process. An introduction to diaries is an introduction to a tool that can deal with information on a specific discipline, job, or interest or that can deal with information pertaining to almost every aspect of the diarist's life. Journals can range from objective and concrete information to subjective and affective information, from the professional to the personal, from external life to internal life, from the general to the specific, and from the ordinary and pragmatic to the poetic and imaginative.

Because diaries can vary as greatly as individuals can vary, the uses for any diary are directly related to the uses the diarist receives or hopes to receive from this information tool. Therefore, what may be absolutely true for one diarist may not be true at all for another. With this understanding, this thesis is not meant to rigidly define journals or to recognize only those traits shared by all journals. Instead, this thesis seeks to identify some of the main uses and goals for diaries and to explore the possibilities of what journals can be or can

become for individuals who wish to use regular, chronological writing as a way to process and record information.

Instead of adhering to stereotypes or misconceptions about what a journal can or should be, it should instead be understood that diaries and journal exist along several continuums rather than as absolutes. The poles of these continuums can be easily seen in the ways diarists use their work. Interviewee David keeps a journal containing primarily objective information that is mostly useful as an information product or object, as a personal reference. His notebook entries are used quite often just after they are written. As time passes and the facts recorded are less relevant to current work, entries become almost unimportant unless he returns to an old project or wishes to construct a chronology or overview of work-related events. Alexandra, on the other hand, keeps a journal that is primarily subjective and is most useful for the process of sorting information which brings her mental and emotional clarity. She states:

I try to write down things...either events that have happened or things that I'd like to remember or that are important to me...or when I'm feeling particularly bad or happy, then I usually write something. Particularly when I'm feeling confused or angry. I use the journal as an outlet...I would say that my writing has been, in the last couple of years, most extensive when I was trying to work through my relationship with my now-fiancé and try to figure out if this was really what I wanted. I'd say [my journal entries] are most extensive when I'm trying to sort something out in my head.

Alexandra's journal entries are not used very often as a personal reference, but their value remains relatively constant over time as a way to review her life and even "stroll down memory lane."

Continuums in journals exist between objectivity and subjectivity, value placed on product or on process, the external (often a profession or other interest) and the internal (often the deeply personal such as relationships and home life). Furthermore, these continuums are not isolated, but, rather, are interrelated. Journals that are primarily subjective in nature tend to be highly valued as an information sorting process while journals that are primarily objective, contain mostly facts and figures, are valued most often as a product or information object. Diaries that focus on the diarist's external life tend to be more objective while a more frequent examination of the diarist's internal life tends to produce a more subjective diary.

As has been shown, however, a diary's place on a continuum need not be fixed and will most likely not remain static over time. Elizabeth's journal tended to be primarily subjective, internal, and highly personal at first, but as time went on she began to use the journal as a reference for specific facts and as a way to process information concerning school work and her career. David's notebook is primarily objective and external. The volumes that he carries on a daily basis have remained so for the most part, but from time to time he will move to a separate volume to deal with the subjective and emotional as it relates to his external life, but also as it relates to his inner life.

INFORMATION SEEKING BEHAVIOR

The Anomalous State of Knowledge

To return to material explored in the introduction of the thesis, Sir Karl Popper's ontological model of knowledge can help explain how information documents originate in the most fundamental sense and also how information as an object differs from the individual's knowledge base, unseen information within the mind (Popper 1972). Bertram Brookes' article not only introduces Popper's scheme, but it also introduces an equation that shows transfer or communication between Popper's subjective and objective knowledge, Worlds 2 and 3 (1980). The body of internal knowledge, the knowledge base or knowledge structure of an individual (World 2), is shown as "K[S]" in Brookes' equation. New information, often a World 3 document, is represented as " ΔI ." When the knowledge structure of an individual encounters new information, it is often (but not always) changed.

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

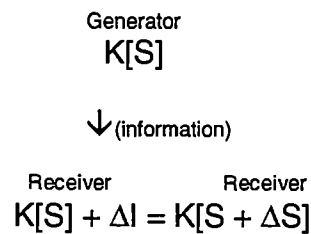
This can be explained as:

Knowledge base + new information = changed knowledge base

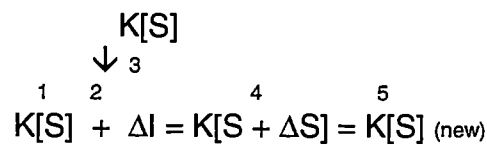
Or this can also be explained as:

World 2 + World 3 = changed World 2

In a related Information Science article, "Anomalous States of Knowledge as a Basis for Information Retrieval," information scientist N. J. Belkin notes that information-seeking behavior is the result of a perceived need within the individual. The individual first experiences an "Anomalous State of Knowledge" (ASK) or perception of an information need which prompts them to seek information (1980). The information applied to the anomaly is received as a World 3 product that has been generated from another individual's knowledge structure (Ibid).



For clarity, this can be broken down into steps:



1. Receiver's beginning knowledge structure or $K[S]$
2. Perception of Anomalous State of Knowledge (ASK) and information seeking
3. Introduction of information from knowledge structure ($K[S]$) of generator
4. A change occurs in the receiver's knowledge structure or $K[S] + \Delta I$. Integration or absorption results in a knowledge structure with new/changed knowledge or $K[S + \Delta S]$ for the receiver.
5. A final step would be a return to a more static knowledge state or $K[S]$ of which the new information/knowledge is a part.

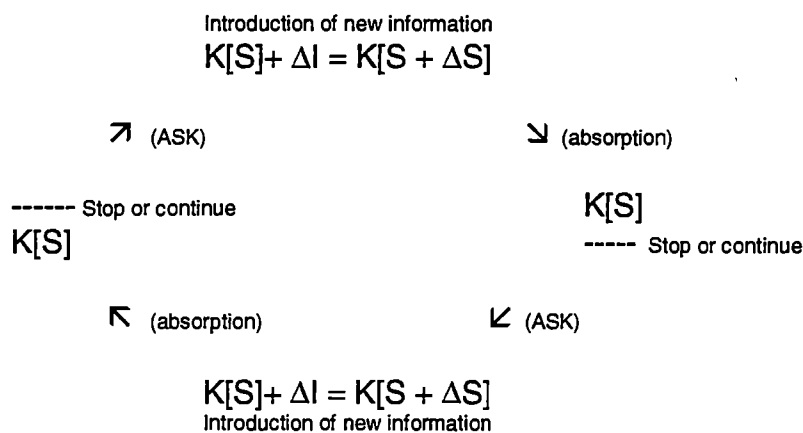
Beyond Brooke's Equation: The Anomaly Cycle

The equation or anomaly process outlined above is linear. Basically, it is the model of a "ready reference" type question. A student attending a lecture on World War II history realizes that although she knows United States involvement in the war took place primarily in the early 1940's, she cannot identify the starting date. This internal recognition causes an anomaly in her state of knowledge, the discovery that she has an information need. The student might seek out information from an outside generator, perhaps a library book (World 3), to answer the question and resolve the anomaly. This information is absorbed and becomes a part of the student's state of knowledge, changing her knowledge base, at least for the time being while she remembers the information. What makes this process linear is that the anomaly requires a single answer for resolution.

In order to resolve anomalies that are more complex, however, the process becomes nonlinear. Information seekers move through any anomaly-resolution process and come out on the other side with a new knowledge structure. If the anomaly or question was a simple one, this may be the end of the process. Depending on the nature and impact of the information added to the knowledge base, however, the anomaly may develop into an *anomaly cycle*. The individual's knowledge structure has new information added, is a bit larger and gives a broader base for comprehending and exploring new anomalies. New problems or questions can be perceived now that the knowledge base has been expanded and the individual is actively exploring the subject at hand.

Human beings don't always simply add one bit of information to their knowledge structures; sometimes knowledge evolves, building upon information to allow for even greater understanding.

The Basic Anomaly Cycle:



Problems Within the Basic Anomaly Cycle

Human beings may experience several problems during the execution of the anomaly cycle. The process itself may be short-circuited for several reasons. Sometimes the anomaly cycle is so gradual and methodical that it may take a great deal of time in order for an individual to realize the existence an internal anomaly. A second problem within the anomaly cycle may be that the individual recognizes the existence an internal anomaly, but cannot articulate that anomaly when initiating information-seeking behavior. They

know they need information, but they do not know how to effectively seek or ask for this information. A third problem may be that the individual does not recognize the anomaly as a problem that can be solved and so never begins to seek information. When one or more of these problems occur and is not resolved, a knowledge structure cannot change.

One problem with the anomaly cycle itself, as it has been revealed, is that it implies information always makes a change in the receiver, that information is always accepted and used. Information Scientist Jason Farradane points out that there are four consequences of encountering information (1979). The first is to reject the information at the interpretive stage, deciding that it is unwanted or unusable. The second consequence is for the user to add the information to his or her existing knowledge without changing it. The third is to complete a gap in the percipient's existing knowledge structure. The fourth response to receiving information is to transform an existing knowledge structure such as when the information contradicts existing knowledge.

Rejecting information does not cause a change in the knowledge base of an individual. Accepting information at face value changes the knowledge base, but does not activate the anomaly cycle. It is only the last two of Farradane's consequences that accomplish this task. The third consequence is directly related to the anomaly cycle as it has been explored. Farradane's fourth consequence, however, is slightly different in nature. Instead of beginning with a perceived gap in knowledge, this consequence of new

information requires the perception of a connection. A simple result of this would be to combine information, the individual realizing that new information fits together with old. In the framework of our earlier example, the exact date for the beginning of World War II fit with what the student expected. A more complex result of this would be to attempt to combine information, but to realize that old information may have to be altered or even rejected because of the new information. Perhaps our student was surprised to learn that World War II began earlier than she thought. Her knowledge base will have to be changed to accommodate this new information. An anomaly exists, but in a subsequent stage rather than at the onset of information processing. The anomaly in this type of situation is that new and old information don't fit perfectly rather than a realization that information is missing.

Another problem with the anomaly cycle itself, as it has been presented, is that it implies that information needed or used usually comes from an external, impersonal, and even written and published sources. Instead of reaching for a library book or encyclopedia, our history student may search through her class notes. Information scientist Robert Taylor, in his seminal article "Question-Negotiation and Information Seeking in Libraries," notes that an individual with an information need may begin a literature search in their personal files rather than at the library (Taylor 1968). Other searches for information may not involve texts at all: our student may ask a peer or friend for the information needed. A study conducted by information scientist and communications researcher Brenda Dervin indicated that in a survey of 465

individuals, it was determined that for solving "recent troublesome situations," there was a high emphasis on informal information networks such as advice from friends and a low emphasis on formal information networks such as libraries and other information systems (Neill 1987, 195). The history student may even approach filling this knowledge gap internally, from her own knowledge base. For instance, perhaps the student's older family members have previously spoken about the war. By putting remembered family stories in context, she may be able to link the information that World War II began for the United States with Pearl Harbor with the knowledge that an aunt was born in December of 1941, just after this event.

The Dervin study previously mentioned also determined that the majority of information needs in the group studied were of a personal nature, what can be called "coping or community information questions (Ibid)." Not only is the information used sometimes informal or personal, but the information problem itself may be partially or completely subjective in nature. When our history student leaves the classroom, or even before she leaves the classroom, she may turn her attention away from formal information needs and instead concentrate on problems involving her relationships with others or her academic goals. Even if the situation that provides a context for the information need is not personal, the personal may become involved. In a study by researchers Joanne E. Cooper and Diane M. Dunlap of journal keeping used by administrators to solve professional dilemmas, they noted that information necessarily involved in situations may include the individual's prior experience,

subjective reactions to praise or criticism, and observations offered by others (Cooper and Dunlap 1989, 2).

Efficient Navigation of the Anomaly Cycle

We now have several progressive models that can be combined to facilitate understanding concerning the transfer of information at the cognitive level. We also have a basic understanding of some of the problems that interfere with the completion and usefulness of these models as well as the variety of types and sources of information that might be involved. In order to move towards practical applications and solutions, it is necessary to look at the abilities that enable an individual to function effectively within these models, to move smoothly through the anomaly cycle.

For effective and efficient navigation of the anomaly cycle as an internal search for information, an individual requires:

1. *Detection I* -- This is the ability to promptly detect a problem, known as an anomaly or gap in knowledge.
2. *Articulation I* -- This is the ability to mentally explore the parameters of the anomaly, to understand the information problem on some level.
3. *Internal Searching* -- This is the ability to scan within the existing knowledge structure (World 2) for ideas, experiences, or other elements that prove useful for solving the anomaly.
4. *Integration I* -- This is the ability to assimilate and reorganize prior knowledge into a new knowledge structure, understanding or comprehension.

Most, if not all, information searches begin internally at some level, however brief the process. Some anomalies may be processed rapidly, even more or less automatically, while others are processed through careful, methodical thought processes. Many anomalies are resolved after internal searching, with resolution dependent upon the subjective judgement of the individual. If the anomaly still exists after internal searching, the individual may seek external help, formal or informal, to resolve the anomaly.

The next part of the process directly involves Brookes' original equation. For effective and efficient navigation of the anomaly cycle as an external search for information, an individual requires:

5. *Detection II* -- This is the ability to identify any gaps or secondary anomalies that still exist after the application of internal knowledge (World 2). If the anomaly has not been altered by internal searching, then this step is not needed. This step also requires the willingness to search outside of one's own knowledge base.
6. *Articulation II* -- This is the ability to articulate the anomaly as a search query and/or strategy. If the individual is going to search for external information on their own, the articulation of the anomaly may be internal, whereas if the individual desires help, they will need to be able to articulate the anomaly externally.
7. *External Searching* -- This is the ability to search for and locate materials pertinent to the anomaly. It involves exploration of the objective world of knowledge (World 3) including personal files and documents as well as published and formal sources (which are the primary concern of librarianship). External searching may also involve sources such as the advice or unrecorded opinions of other individuals, deliberate observation, or experimentation.
8. *Integration II* -- This is the ability to effectively assimilate new information into the knowledge structure; bringing information from World 3 to the individual's World 2. It can be called understanding or comprehension.

Another problem concerning the anomaly cycle involve the cycle's outcome and the individual's ability to utilize that outcome. Although the cycle has been successfully completed, the process may have taken place with such rapidity or be so intricate in nature that, although a change has taken place within the knowledge structure, the individual cannot articulate what they now know. The individual may not have the vocabulary, a working model, or other cognitive tools needed to explain the new knowledge structure. Another aspect of this problem may be that the cognitive steps (reflected in the number of cycles) have become too confusing to separate and the individual can no longer trace the path they followed to new understanding/changed knowledge structure. This loss of steps or cycles makes it difficult to explain the new knowledge structure to others or to back up a few steps if the idea has diverged in an unwanted direction. When articulation problems occur and are not resolved, knowledge cannot be successfully transferred from the internal world to the world of formal/objective knowledge. To rephrase this, knowledge is unable to be transferred or communicated from World 2 to World 3.

To successfully transfer or communicate information from World 2 to World 3, several steps may be necessary:

9. *Articulation III* -- This is the ability to verbally articulate or explain the new knowledge structure. It may also be important to be able to express the steps followed to reach the new knowledge structure. In this phase, the individual can now state what he or she knows.

The last two steps are vital for the growth and expansion of World 3:

10. *Documentation I* -- This is the ability not only to articulate the new knowledge structure, but to do so in a physical/objective manner. More specifically, this step might also be called *raw documentation* with an outcome such as a diary, a work log, a sketch, an informal lecture which has been recorded, notes, etc. Sometimes documentation is produced during the thinking process or fuels the thinking process, as is often the case with diaries. Results of this step may sometimes be considered an end product if they are published or reach formal information retrieval systems such as inclusion in an archive or library.
11. *Documentation II* -- This is the ability to modify and refine step ten into a final objective product that is more concise, coherent, and polished. This step might also be called *end product documentation*, with an outcome such as a report, an essay, a journal article, a novel, a practiced and recorded speech, a painting, etc. "Gatekeepers" such as editors and publishers may have a large effect on which sources of information reach this last step, at least for publication purposes. Ultimately, whether or not articulation of a new knowledge structure/idea has reached this point is a subjective decision on the part of the author and the audience. The products of this step, particularly when published, are of primary concern to libraries.

Returning to Popper's worlds and the concentric Venn diagram (Figure 2 found in Chapter One), World 3 can be seen as divided to produce a further subset as seen in Figure 3. The total shaded area in Figure 3 represents Popper's World 3. The darkest region at the extreme interior of the diagram represents those World 3 documents that are polished and/or published, *Documentation II*. The lighter shaded region surrounding this is *Documentation I*. Conceptually, this lighter shaded region is where diaries exist.

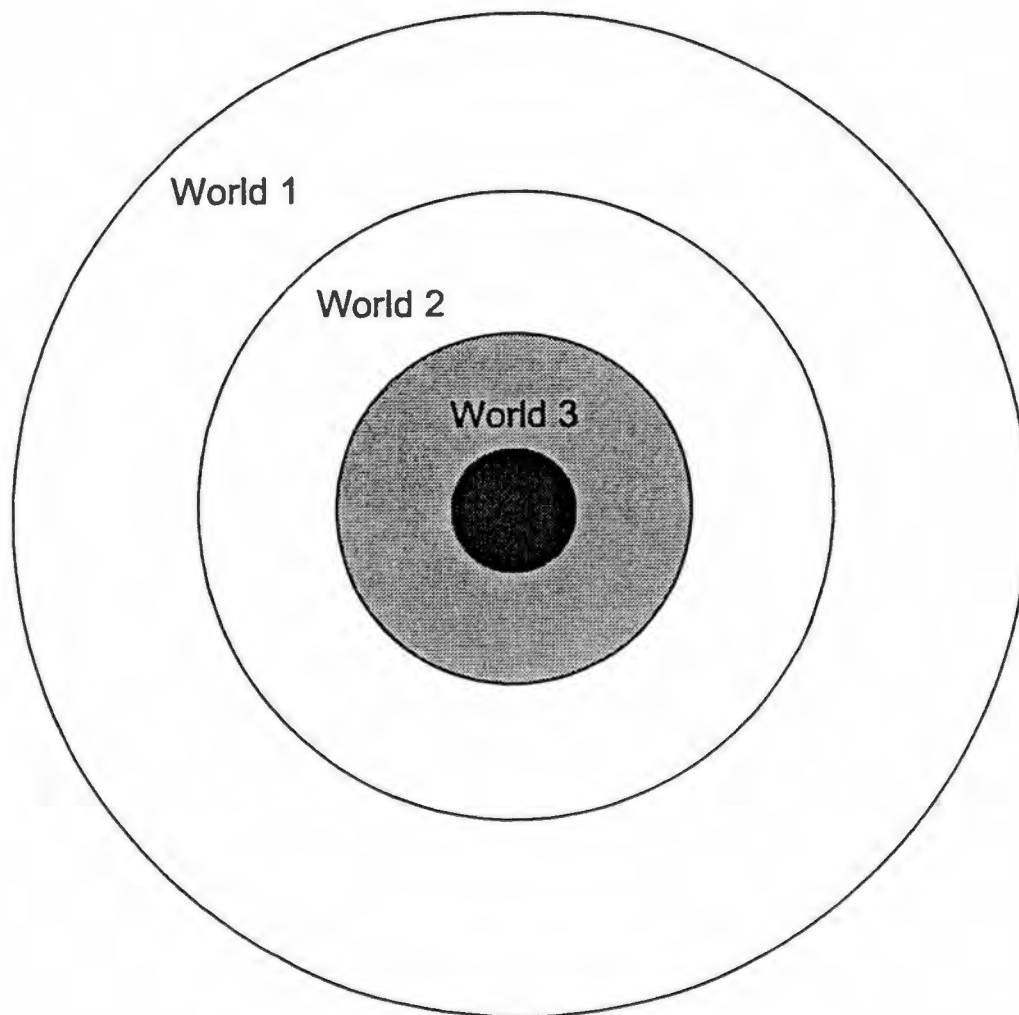


Figure 3. Concentric Venn diagram of Popper's Worlds showing *Documentation I* and *II*.

To review, change in knowledge structure begins with internal (World 2) cognitive processes. Information may be simply added to an individual's knowledge base, or a negotiation process may occur in which an individual seeks information and/or integrates information into their knowledge base. A change in an individual's knowledge base may involve both new and previous information, both internal and external processes, and both internal and external sources of information. The fundamental part of information seeking and processing, the portion of the cycle that actually resolves the anomaly, may be acted out a single time or multiple times. The cycle may occur only as an internal search (one or more cycles through steps one through four) or as both an internal and external search (one or more cycles through steps one through eight). How the cycle is acted out, its speed and the number of cycles required to resolve the anomaly, will depend upon the individual as well as upon the nature of the problem and information involved. In some cases, the new knowledge structure is then articulated and transferred to the body of formal/objective knowledge (World 3).

Journals and the Anomaly Cycle

One of the problems of dealing with cognition is that these processes are unseen, take place within the individual's mind. As will be explored, however, some individuals use external expression to help facilitate information processing and to preserve a record of it. Cinthia Gannett, an English professor

and researcher at the University of New Hampshire, notes these uses for journals, that journals can be used to "resolve dilemmas, to articulate new questions (Gannett 1994, 285)." Although she does not use the same terminology as information scientists when referring to the anomalous state of knowledge, she affirms that diary entries can "document moments of change, the precise and sudden interrogation of deeply ingrained ideology, the eruption of abrupt and disturbing questions or illuminations (Ibid., 286)." She adds, "The journal also acts as a witness to the process of discovery and reconciliation: it follows the transformation of undifferentiated but real discomfort and confusion into questions...(Ibid)."

Researcher Marlene A. Schiwy adds to these ideas by making note of a phenomena related to Popper's worlds, that a diary also serves as a place where the individual can reflect upon the "dynamic relationship between the diarist's inner and outer worlds (Schiwy 1994, 234)." Furthermore, to return to Gannett, "The journal is a means of acquiring, not merely recording knowledge...(Gannett 1994, 279)." The diary serves as a tool in the individual's process of analyzing, organizing, and integrating information.

The information scientist, then, can find journals or diaries of interest for two reasons. First, journals or diaries are intimately connected with the cognitive processes of the individual. Studying diaries, their uses and patterns, can help researchers better understand how human beings process and use information. A second link between diaries and information involves the diary as a source of recorded information. Information scientist Robert Taylor, in his

1968 article "Question-Negotiation and Information Seeking in Libraries," notes that an individual with an information need may begin a literature search in their personal files rather than at the library (Taylor 1968, 181). The information scientist intent on providing an optimum of usable information will want to consider the possibility of integration between traditional information databases and collections of personal information (Bovey 1996).

SUBJECTIVE INFORMATION

It was addressed earlier that diaries are often dismissed or devalued. This is due partly to the stereotypes associated with them, but also with attitudes that exist towards information as a whole. In particular, the extreme positivist point of view holds objective information in such high regard that anything admittedly subjective is at best suspect, at worst worthless. Later in the thesis, diaries will be examined as information products, which will do much to dispel the idea that they are worthless. Before this, however, an examination of the nature of information will also be helpful for arguing the worth of journals, especially ones that can be considered subjective.

The Subjective and the Personal

Several diary-keepers were interviewed for this thesis. One of these diarists, David, stated that he used his journal as a reference for answering personal reference needs, but then interrupted himself to clarify that by "personal" he meant "things that I personally did." What David wished to clarify in the interview is that he uses his journal mainly in his professional life, yet the journal is personal in that he does not share the journal with colleagues nor is the journal owned by his employer. The journal records information relating to his own projects. The difference may be subtle, but it is important. David

indicated that he kept a separate notebook volume from the one he normally carries to work everyday, one that recorded his observations and feelings during a brief yet tumultuous period of his life. This volume is also personal, but to a greater degree.

In a broad sense, personal information is information linked to an individual. A journal may be filled with factual information such as a log of weather conditions and lists of people who have telephoned that day, but this is personal because it is of interest to the diarist and/or relates to the diarist's life. As a whole, that is the type of information that this thesis is exploring. Within the thesis, however, documents will be explored that are like both David's volumes, the more objective and the more subjective. For clarity, the word "personal" will be used in a relative sense unless otherwise indicated. When a diary or piece of information is referred to as "personal" within the thesis, it means the diary or information refers to the diarist's life outside of work or academics and sometimes writing or information that is deeply affective in nature as well.

Objective Information

When considering information and knowledge, it is not difficult to contemplate Popper's worlds in abstract terms, as in the previous section, or even in uncomplicated terms. A simple example of the anomaly cycle used in real life might be to consider once again the undergraduate student who is

taking a beginning level history class on World War II. The student probably knew something about World War II before taking the class and course lectures helped the student build upon this knowledge. The anomaly cycle was active during this process. At midterm, the professor assigns a research paper to the class where each student has to write about how the quality of life in a specific area of Europe was affected by the war. The student in question is assigned Amsterdam. She considers what she already knows about Amsterdam and World War II, immediately realizing that she does not have enough specific knowledge about various aspects of life in Amsterdam during the time period to be able to write a paper of appropriate length and depth. When cognizant of the fact that she needs to know more information in order to write the paper, the student perceives a gap in her knowledge base. To resolve the anomaly, she goes to a library and finds several history texts that help her build upon her knowledge base on the subject. The published information in the library materials can be used by the student, along with her previous World 2 knowledge, to construct meaning and new knowledge. After this process, her World 2 will be altered and/or enlarged and the paper will be a World 3 object representing the a large portion of the student's knowledge base on the subject.

The information from the library that the student is using in the example above is objective in Popper's sense of the word, a part of World 3. The books or periodical articles the history student is using (as well as her finished paper) are *objects*, physical collections of symbols (letters, words, and punctuation) printed on paper that are put together in such a way that they convey the

author's World 2 knowledge. The student holding a library book (or her research paper) in her hands can call this object "information" because it represents knowledge. When looking at information from this perspective, it can be seen that the history student doesn't actually go to the library looking for ideas, concepts, or thoughts, although this is the ultimate goal. Instead, on a basic level, the student goes to the library looking for books or other materials that contain ideas, concepts, or thoughts. The difference may seem subtle, but it puts the focus on defining information as Popper's World 3, which is somewhat separate from knowledge, which is perceived as Popper's World 2. Instead of trying to deal with information in an abstract sense, it is pragmatically focusing on information as an object that can be seen, picked up, passed from one person to another.

To explore this further, information scientist Jason Farradane describes information as, "any physical form of representation or surrogate, of knowledge, or of a particular thought, used for communication (Farradane 1979, 13)." Information is defined as "the written or spoken surrogate of knowledge (Ibid.)" This viewpoint, in which users are often seen as input-output processors of information, allows for the creation of whole information systems to effectively organize, store, and retrieve surrogates of knowledge (information) usable as input for an information user (Dervin and Nilan 86). When information is viewed as units or documents, usually bodies of text, they can then be packaged and organized in such a way that they might be retrieved by the user who needs it. A data chart, an article in an academic journal, or a book can be cataloged,

indexed, and stored in an systematic manner so that it can be accessed when it is needed. Databases, search logic, indexing terms, and cataloging rules can be developed to facilitate the effective representation, storage and flow of information. With accelerating technology and the information explosion of the twentieth century, effective handling of information has become and will continue to be incredibly important to an increasingly global society..

The Subjective in Information Seeking and Retrieval

Despite the usefulness and validity of the information-as-object viewpoint, it need not be the definitive or complete approach to information or Information Science. The operative word in the paragraph above may be the word "effective." Our history student will not want to simply walk into the library and use any books. She will want books about Amsterdam and World War II. An important part of effective information retrieval means that information objects located for the user must be useful, must be materials that are relevant to the user's wants or needs. Information scientists F. Wilfred Lancaster and Amy J. Warner note that *relevance* expresses the appropriateness of a particular document for a particular user and indicates a positive relationship between a document and either the user's request statement or the information need of the user (Lancaster and Warner 1993, 47, 51). To further complicate matters, it is possible for a document to match the query terms put into the library online catalog and even seem relevant to a librarian or a panel of judges,

yet the user will decide the material is not relevant. What if the library's online catalog pulls up a record for a book about the impact of World War II on Amsterdam's maritime shipping industry? While it is possible that some of the information in the book may be helpful, perhaps the student decides that the overall content will be too narrow and specific for a undergraduate level paper and therefore decides not to use it. Or what if our history student finds a book specifically about Amsterdam during World War II but it is written at a young child's level? Most likely, the book will not contain information that the student doesn't already know. When an individual seeking information decides that a particular document contributes to the satisfaction of their need, the document is said to be *pertinent* (Ibid., 53). The user, then, greatly affects whether the information can be determined as relevant, pertinent, and useful. Information scientist Tefko Saracevic states:

Some things are more relevant than others, some things are not relevant any more, and some have a chance of becoming relevant. Relevance depends a great deal on what we already know and on what is generally known. We must admit that there are various aspects that at times predominate in determining relevance, such as: what we think we want and how we ask for it; how we understand what is asked and what we think we asked; what is wanted in contrast to what is really needed; who is asked, who is asking; what the situation is; what will be done with what is provided; and so on (Saracevic 1975, 325).

What seemed like a simple problem at first, finding information about World War II and Amsterdam, appears more intricate upon closer inspection. Not only is the student actually looking for objects rather than ideas, but a subjective decision on the part of the information user, pertinence, introduces

complications. Yet another part of the subjectivity problem may have come from the other end of the information seeking process, the information system. It was stated earlier that the history student doesn't actually go to the library looking for ideas, concepts, or thoughts, even if this is her ultimate goal. Instead, she goes to the library looking for books or other materials that contain ideas, concepts, or thoughts. Similarly, unless the student is very familiar with the library, she doesn't immediately look at the books themselves even though this is a goal. She will most likely go to a card catalog or online computer to see what the library owns on her research subject and find out where these materials are located. The computer, of course, does not deliver materials, but instead presents records or listings that represent materials in the library collection. At the beginning of her information search, then, the student is looking at representations of surrogates of knowledge. Again, the difference may seem subtle, but it becomes important when an information user must rely on these records to lead her to the books she wants which will contain the ideas, concepts, or thoughts she needs.

When our hypothetical book about Amsterdam's maritime shipping industry during World War II arrived at the library and was processed, the cataloger decided that the book mainly involved the subjects of Amsterdam and World War II then used these terms to index and represent what the book was about. The cataloger was making decisions concerning the *aboutness* of the book in question (Maron 77). Because of these decisions, when a librarian or library user searches for "Amsterdam" and "World War II" in the computerized

card catalog, the book is automatically retrieved as relevant. Perhaps a different cataloger, however, would have deemed that although World War II was used as a basis for before-and-after comparison of changes in Amsterdam's shipping industry, the book is mainly about Amsterdam's shipping industry itself and used the key words "Amsterdam" and "shipping" to describe it as such, leaving "World War II" out completely. If the book in question had been cataloged without using the term "World War II" as a descriptor, it would not have been retrieved by the history student's search. To further add to the confusion, cataloging choices consist not only of deciding between major topics, but also between synonyms. Would "shipping" be the best key word, or would "international trade" or "exportation" be preferable? The decision of the cataloger, while hopefully careful and adhering to standards such as controlled lists of preferred vocabulary, cannot be thought of as absolute or flawless. Even if catalogers had time to read each and every work cataloged, their choices may not reflect what other individuals may deem that the work is about. The aboutness decision is at least somewhat subjective. To use Popper's term but in a different way, the aboutness of the book, just like the pertinence when seen by the user, is not objective.

What is happening in the library context as well as in other information systems is that the information user is somewhat removed from information during the information seeking process. Rather than walking into a library and immediately having contact with information, the history student must use computer records representing information objects to help her locate these

objects. From the computer records and from handling the object itself, she must then determine if the object is likely to hold the information she needs. Only at this point and only through prolonged interaction with the information object (reading), will she have actual contact with the information that was her ultimate goal in coming to the library and that will resolve her gap in knowledge. Perceptions and decisions that are at least somewhat subjective in nature stand between her information search and the information itself.

It has been shown that the subjective is involved in information retrieval and in Information Science. This is an important concept in information retrieval, yet it is also a step in coming to an alternative understanding of information as a whole. As we will see, an understanding of the subjective does not shatter previous understandings of information or invalidate more practical levels of dealing with information, but instead opens new avenues of exploration and study.

Two Meanings of "Objective"

There are two uses for the word "objective" as it pertains to information. One applies to Popper's World 3 and to Farradane's idea of information as a surrogate of knowledge. Objective information is knowledge that has been articulated and exists as an object (although Farradane also includes unrecorded speech which cannot be physically manipulated). The second way the word "objective" applies to information is probably the more familiar usage

of the word and is reflected in dilemmas concerning relevance, pertinence, and aboutness. An absolute meaning of the term "objective" is to hold or express ideas where human biases, prejudices, emotions, and values are not present, to be independent of the mind and somewhat detached, impersonal. Within a positivist framework, the implication is that the objective is pure, trustworthy, and universal in scope. As we have seen in the context of information retrieval, however, absolute objectivity is not possible. While information specialists such as librarians try to be as objective as possible about deciding aboutness and relevance, it is impossible for to know whether all possible information has been included in the decision-making process and if human factors are indeed having an impact. Pertinence, too, is a decision is often affected by a variety of human factors. "Objective" actually means information where human mindsets, biases, prejudices, emotions, and values are minimal and/or carefully verified, where the personal is closely monitored and limited. This lack of complete objectivity in information retrieval leads to a question of whether objective information is possible at all.

While it is logical and functionally beneficial on some levels to view information in terms of objects that are surrogates of knowledge represented by records, it can become all too easy to be removed from the content of these surrogates and to assume that there is a way to be objective about their content during the information seeking and retrieval process. To minimize the subjectivity of the user in information retrieval, emphasis is placed on finding

indexing or cataloging terms that represent the intent of the information creator (usually the author of a document) as closely as possible (Farradane 1979).

Many writers concentrate on meaning as perceived by the recipient of information. As is well known, however, the meaning of a communication can be perceived differently by different recipients, according to their initial states of knowledge and ability to understand the communication, and even by the same recipient at different times, since his state of knowledge will change with time and experience. We cannot therefore look for any fixed meaning in the orbit of the recipient. The only valid meaning must be sought in the originator's thought; it is certainly not independent of the originator (Farradane 1979, 14).

While focusing on creator or originator rather than user may help narrow down possible choices when deciding what an information object is about, this does not solve all information seeking and representation problems. When finding a way to properly represent an information object in the information system, a subjective decision is still involved. For example, although a book may come with a description on the book jacket, have book reviews available, and have previous cataloging records that a later cataloger can refer to, it can not be known how closely these clues follow the actual content of the book. The book jacket may be intended to help sell the book rather than accurately reveal its content. Reviewers are readers that bring their own experiences and personalities both to the books they read and the reviews they write. Previous catalogers may not make the same decisions a current cataloger would make. Unless the creator is also the one writing the book jacket, reviewing, cataloging, indexing, retrieving, and using his or her own work, some other person such as a reviewer, cataloger, librarian, or user is still going to have to make decisions

concerning the aboutness, relevance, and pertinence of the document. Even if problems with aboutness and relevance could largely be overcome with specific and careful cataloging and indexing standards, the problem of pertinence cannot simply be overlooked if information systems are to be as effective as possible to users. As Farradane admits, users are individuals and approach information and information systems with different learning styles, different levels of understanding, and different types of experience. When information is simplified to being an object and/or when information seeking is simplified to matching query terms with catalog terms to hopefully reach an "average" information user, diverse information users "must bend to the information in order to use it (Dervin 1977, 20)." In a library context, users quite often have to resort to guessing how something might be labeled or described, sometimes trying one term after another until hopefully something relevant is retrieved.

Concerning information retrieval problems that are subjective in nature, there are two ways of seeking solutions. One path towards solutions concentrates on the information system. A network of shared records from various institutions can help catalogers compare and contrast records, hopefully reducing subjectivity and chances for error. Another possibility along this same path is to expand the information system (Dervin 1977). If the book on Amsterdam's shipping patterns during World War II was indexed under many keywords, then many different searches would retrieve a record for this document. While this might result in overly high recall, more records per search than a user would like to deal with, it is still a viable solution. Quite another path

towards solving information retrieval problems is to approach from another angle, from the point of the user.

The Cognitive and the Subjective: Dilemmas

Farradane indicates that the point where information becomes subjective due to a focus on the user is the point where Information Science should best pull back, stating that "Mental states cannot be observed directly" and that "People are not accustomed to analysing [*sic*] their own stages of thinking, and do not respond well to the subject (Farradane 1979, 14)." In addition, Farradane points out that although there are sometimes immediate and observable results of information, an action or reaction that can be readily seen in the information user, in most cases the information is converted to stored knowledge and cannot be perceived by an outside party such as an information scientist. Even when information results in a change in the user, action may be eventual and very difficult to trace (*Ibid.*, 16). But can Information Science afford to ignore the information seeking behaviors and cognitive processes of information users if those users are to get what they want and need? How can a variety of individuals be served properly if individual differences are not addressed or studied?

While Farradane is correct that looking into information users' mental states and stages of thinking becomes somewhat murky and difficult to trace, it can be argued that other fields and disciplines attempt similar explorations on a

regular basis. Psychology, Education, and Communications are by their very natures involved deeply with cognitive processes yet have developed reasonable and effective methods of study. The problem isn't a lack of means for studying how information impacts an individual or how individuals internally seek or use information. Instead, the problem is a reluctance to allow disciplines to overlap.

Where do the boundaries of Information Science lie? For example, where does Information Science's study of computerized information systems or databases end and Computer Science begin? In order to create an computerized information system or database that handles information effectively, it must first be understood how a computer works and what possibilities it holds. On another side of Information Science, boundaries may be shared with Business and Advertising. On a practical level, how do information specialists promote information use and maximize information services to users?

Exploring ideas such as relevance and aboutness push Information Science towards the user and user behavior. How do users ask for information? How do information users interact with information professionals and information systems? The fundamental question might be, how do users ultimately use the information they receive and what effect does it have on their lives? Where information science must acknowledge the subjective and turn towards the internal aspects of information seeking and use is where Information Science begins to share and overlap with studies in areas such as

psychology, philosophy, educational theory, creativity and problem solving, discourse analysis, and communications. While every information scientist may not be interested in the far ranges of cognitive information impact, it is important that somewhere the deeper implications are being studied. Viewing information as an object, as a surrogate of the creator's knowledge that must somehow be taken at face value, is a valid viewpoint, but it represents only one level of the problem of finding correct information to adequately fill a user's need. Exploring outside the strict boundaries of Information Science brings greater understanding to the discipline. The areas of study mentioned as well as others can help Information Science to explore the effects of information within the individual which may help designers of information systems make these systems more effective to users. It may also help librarians and other intermediaries understand their patrons or customers more fully. In return, Information Science can offer other disciplines illumination on the roles information technology and information seeking behavior play in what information reaches and affects an individual.

The Cognitive and the Subjective: The Nature of Information

Communications researcher Brenda Dervin has explored many aspects of Information Science including how the cognitive and subjective relates to problems such as information retrieval. While information retrieval is important, especially to the field of Information Science, user-focused studies also have

wider implications that impact how information is perceived as a whole and in a way that affects other disciplines. Dervin notes that a more traditional view of information is often in absolute terms:

Information is essentially seen as a tool that is valuable and useful to people in their attempts to cope with their lives. Information is seen as something that reduces uncertainty. As the individual moves through time and space (i. e. the time-space continuum that makes up a life), it is assumed that information can both describe and predict that reality and thus allow the individual to move more effectively. It is in the context of these premises that libraries and other information delivery systems are mandated to collect information, store it so it can be retrieved, retrieve it when necessary, and disseminate it as needed (Dervin 1977, 18).

Dervin observes that this traditional perception of information "implies a view of the world as a place in which there is a complete order" and that "information is but a description of the order (Ibid., 21)." To put this in terms of Popper, this view of information assumes that it is possible for World 1 to be clearly and properly viewed and perceived in World 2 and even clearly and properly represented in World 3. Dervin argues, however, that:

Despite the prevalence of these assumptions, observations about the nature of man and the nature of his environment do not correspond. This view of information posits man as a totally adaptive creature, using information about reality to adapt to reality (Ibid.)

Or, to state this a slightly different way:

The assumption -- that messages should have direct impact -- rests on a number of other implicit assumptions. It assumes, for example, that messages can have a direct impact, that somehow they can get into receivers the same way they left the sources, and that they produce in all receivers the same impact. It assumes that a message is received the same way by source and receiver and by one receiver and the next receiver. It assumes that there is nothing unique about the receiver that

will impact his or her use of the message. It assumes that there are no cognitive processes intervening between message and use.

At root, behind all these assumptions, is a core assumption dealing with the nature of information, that information can be dumped into people's heads as if people's heads were empty buckets. To make this assumption it must be assumed that information is a thing rather than a construction, that it exists independently of observers and has inherent, correct, absolute, and isomorphic relationship to the reality it describes. Within the context of these assumptions, it is reasonable to expect that a receiver exposed to information should *ipso facto* respond (Dervin 1981, 74).

What is true in information retrieval has implications for information as a whole. The issue Dervin is addressing is similar to what Farradane previously quoted; there is an underlying indication that information is subjective in nature, that how information impacts the user is based on the individual. Farradane points to this as a stopping place, a boundary that cannot be breached in Information Science. Dervin, on the other hand, not only addresses the idea, but moves in for further study. She rejects a viewpoint that users are passive recipients and use primarily objective information, that the task of information retrieval simply being to get the information object to the user (Dervin and Nilan 86). Instead, she views information as something constructed using received information, but also the user's experience and prior knowledge. This knowledge, because it is constructed within human beings, can never be objective in the ultimate sense of the word because it can never be completely separated from the individual. An object from Popper's World 3 can never be completely separated from the creator's World 2. Of this alternative view of information as constructed, she states:

The core assumption in this alternative is that information is not a thing. Instead all information is seen as a product of human observing. All human observing is assumed to be constrained by the limits of human perceptual equipment, by the control exerted on perception by time and place (Dervin 1981, 75).

Information scientist S. D. Neill notes in his 1987 article exploring of Dervin's ideas, "The Dilemma of the Subjective in Information Organisation [sic] and Retrieval," that:

Although Dervin does not make the point, it is important to see that there are two separate assumptions being set up for demolition here: 1. information exists independently of observers; and 2. information is an absolutely correct match for the reality it is intended to describe (Neill 1987, 197).

To restate this, the ideas brought forth about the nature of information are 1. information is dependent on observers and 2. information is not an absolutely correct match for the reality it is intended to describe. Not only are aboutness, relevance, and pertinence subjective decisions, but information itself can be seen of as subjective.

Neill continues his analysis of Dervin's work by bringing together two statements by Dervin:

In her most definitive work to date, Dervin made the statement that sense-making assumes that all information is subjective. 'Since it is assumed that all information producing is internally guided and since it is generally accepted that all human observing is constrained, sense-making further assumes that *all information is subjective*.' (Dervin's emphasis). [Dervin 1983, 4]. However, after discussing various constraints on human observing, namely time, space, and physiology, she qualified the statement that all information is subjective in such a way as to lead us to read her use of the word 'subjective' as 'subjectively constructed': 'Information seeking and use are posited at 'constructing activities' -- as personal creating of sense. It is assumed that all

information is simply the sense made by individuals at specific moments in time-space. Some 'information' becomes agreed upon and is termed 'fact' for a given time frame at least. Others are controversial and are called 'opinion' or 'delusion' depending on the socio-political context and/or the charity of the observer [Dervin 1983, 4]. (Neill 1987, 197)

To return to a discussion of Popper, it can be said that World 1 represents reality that can be perceived in part by human beings, but not completely or flawlessly. World 2 is knowledge, but that knowledge originates with an individual who will, to some degree, always approach information and observation colored by his or her own personality and experiences. World 3 is still information, but it cannot be called purely objective no matter how many standards or scientific procedures have been applied to the process of discovering and articulating that information.

On a more practical level, the complete total of actual events and conditions in Amsterdam during World War II can be thought of as World 1. The history of this place and time seen by a historian or the experience of this place and time as encountered by someone who was there are individual World 2s. A collective World 2 on this subject would be all the perceptions and thoughts on Amsterdam during World War II somehow be brought together. World 3 related to the subject would be all the writings, recorded speeches, and artworks that have been created on Amsterdam during World War II. Yet even though World 2 and World 3 would be vast, neither could not represent the complete reality of World 1, of everything about Amsterdam during World War II

as it actually existed, free from a particular mindset, prejudice, memory loss, emotional bias, and limited viewpoint.

Information and Quality

If all information and resulting knowledge is subjective rather than absolute, then how can one come to trust any information enough to absorb it, use it, act on it? To repeat Dervin's quotation, "Some 'information' becomes agreed upon and is termed 'fact' for a given time frame at least. Others are controversial and are called 'opinion' or 'delusion' depending on the socio-political context and/or the charity of the observer (Dervin 1983, 4)."

Information has to be judged before it can be rejected or used and this does indeed rely on context and observer. More specifically, the idea of *quality* of information is introduced.

Our history student will most likely not wish to use information from a comic book set in World War II or a historical romance novel in her paper. These materials may be found in a library and they may contain information, but they are not intended to serve informational needs such as a query for the Amsterdam research paper. Elements in these documents are most likely intended to facilitate the narrative and entertain the reader rather than impart information that has been by research and/or consensus labeled "fact." Indeed, these documents may knowingly contain falsehoods; "poetic license" may be

taken by the author so that known information is changed to serve the plot or expand the entertainment factor.

It is important to be able to trust information, at least on some level. As has been stated, in order to absorb and build upon information, we first have to accept or reject it (Farradane 1979). With acceptance, information may be taken at face value or reconfigured using other information, but it has to be "believed" or deemed usable at some point for it to have an impact on the information user. Individuals test information all the time. We look for clues to see if the information source is credible. We compare and contrast information with what we already know and have accepted. On a small scale, during the course of our everyday lives, we constantly make these judgements and often on a more-or-less unconscious basis. As a child our brother tells us that if we jump off the roof with an umbrella we'll float down to the ground. Based on our elementary knowledge of gravity, umbrellas, our brother's general character, we may determine this idea to be false. On a larger scale, the judging of information takes place constantly and consciously in the academic world. Our history student finds a book on Amsterdam in World War II that is of an appropriate level. How does she know the book is credible, that the information in it is valid for use? She may look at the number of citations to ascertain an understanding of the author's knowledge and the degree of consensus with other historians. She may also judge the reputations of the scholars cited, the quality of writing, the reputation of the publisher, and the degree of agreement with other sources.

What is slowly being revealed is that the concept of something being subjective or objective (in the conventional use of the word rather than Popper's) is relative. How we receive and judge information is dependent upon our perspective, what we know about the origin of the information and/or how that same information has been received by others. Internally, we decide that something we hear or read or perceive is true and/or useful based on our own needs and knowledge base. For many of our information needs, this type of verification is enough. However, sometimes we desire not just to be able to trust information enough to explore it; we want to be able to have enough confidence in it to use it and build upon it, share it with others. This may mean that we spend time carefully considering information before using it. Or we may discuss it with trusted authorities or peers. Or we may rely on means of regulating the production or dissemination of information such as scientific procedures or academic standards. At the very least, we try to be as objective about it as possible, to show that the information we are using or have constructed is as universal and true as possible, not bogged down in our own specific perceptions and emotions. The process of judging information isn't always easy and clear. As Dervin seems to point out, the difference between "opinion" and "delusion" is sometimes slight and difficult to determine (1983, 4). Yet in order to be credible to others, we must handle the information we receive responsibly.

It has been discussed how information retrieval contains the subjective and how this can lead to an viewpoint of information itself as ultimately subjective. It has been discussed how the boundaries of Information Science should be expanded to explore the cognitive reaches of the information user as well as the ways in which Information Science can enjoy reciprocal learning with other disciplines. An investigation into the judgement of information and the idea of quality has been addressed with an understanding that although no information can be ultimately objective, the word "objective" can be used as a relative term. While there are no absolutes, decisions on information objectivity and quality can be reached by consensus and by validation procedures. Through these explorations, specific examples were shown for how these ideas might effect an information seeker. This information seeker, a hypothetical history student, is in an academic setting and has a library as a clear source of information. Yet students or scholars aren't by any means the only individuals with information needs nor are library materials the only sources for solving anomalies or addressing knowledge gaps. One implication of studying the information user's perspective and exploring the boundaries where Information Science overlaps with other disciplines is that just as the cognitive and subjective no longer have to be ignored or devalued, attention can also be spent on the affective and the personal, with appreciation of the usefulness of these aspects as they apply to knowledge. These issues will be explored further later in the thesis when their connection to journals and diaries can help expand their implications.

On a final note for this section, it can be noted that the terms "subjective" and "objective" are as problematic as "personal." If all information is subjective and ultimate objectivity is impossible, as is shown, then how can we discuss journal content as objective or subjective? In the thesis, these words will be used in relative terms. An objective journal entry will contain information that can be labeled "factual" or that contains very little affective material while a subjective journal will include a much greater degree of opinion.

DIARIES AS PRODUCTS: INFORMATION OBJECTS FOR READERS

To return to our hypothetical history student, a search of the library for 'Amsterdam' and 'World War II' has retrieved a number of materials. Some materials were rejected for the reasons previously outlined. The children's book, the book on shipping, the comic book, and the historical romance novel have been returned to the shelves. Other materials, however, have been deemed relevant and pertinent by our student. The accepted documents have been judged to be relevant to her topic and pertinent to her needs; they have been deemed quality, useful information acceptable for resolving her knowledge gap. Then our student finds one more possible source listed on the library's online computer, a published diary from World War II.

Diaries as Primary Sources

The Diary of Anne Frank, an actual diary written by a Jewish teenager during World War II, is one of the most popular books of the twentieth century. First published in 1947, the diary has sold 25 million copies in more than 50 languages and has become one of the standards in required classroom reading (Sheppard 1998). Why has the personal writing of one teenager become so widely-received and so embraced by the world? One answer is to view the diary in objective terms, to perceive it as a repository of valuable information

about the time and place in which it was written. Spalding notes that sometimes the information in a diary can be quite valuable and unique with a single diarist making a contribution to history (Forbes 1923, Spalding 1949). John Manningham's diary, for instance, is the sole surviving account of the last days of England's Queen Elizabeth I and the accession of James I (Spalding 1949, 24).

While Frank's diary may not provide the sole surviving account of a time and place, factual data about events and wartime life are included in her writing. If Frank had not realized this potential for her diary before, in 1944 she writes in her diary of a radio broadcast in which a Dutch official urged people to write personal documents such as diaries and letters that could later be used to reconstruct a history of the time period. With shifting government regimes and widespread destruction, the loss of official documents and journalistic works was a real possibility. Even surviving documents were feared to be of dubious use, possibly created with propaganda rather than truth in mind. When compared with other sources from the time period, the diary can help historians know more about Amsterdam in World War II.

John Anthony Scott of the Rutgers University and the Committee on History in the Classroom addressed the role of primary documents including diaries in studying history. His article, "Historical Literature and Democratic Education," advocates integrating original sources into studies of history rather than merely accepting the way history has been interpreted and even packaged by others. He observes:

Students of history need access to sources of information that provide direct or primary evidence about reality. Primary records are those records that people in the past have *themselves* created. In each generation those who would learn about the past must go back to these records and examine them for themselves. This is not a privilege to be enjoyed merely by professional historians. Without access to primary evidence, nobody can make contact with life as it has passed through time, nor become fully aware of the historically created community to which each of us belongs (Scott 1992, 153).

Scott's article addresses the idea that primary documents such as diaries provide evidence about history that can be included with the body of evidence used to create a picture or interpretation of history. Yet Scott is also touching on another idea. In his article, he adds:

Such sources introduce students to the wonders of the American past, empowering them to possess it as their own. Validating the past as something real, intensely alive, and profoundly human, arouses curiosity (Ibid., 159-160).

Empathy and Emotional Connection

Frank's diary contains evidence about life in Amsterdam during World War II. But if Frank's diary was merely to be gleaned for facts then its content, once compared with other sources and more or less verified, might have quickly been absorbed into the general knowledge found in history books about World War II. Occasionally, the diary might have been brought out to compare its content with various interpretations of history. Instead, the diary has not only become popular, but it has become popular as an entity; the value of the diary is not merely the worth of its factual data. Frank writes about the mechanics of

her family's hidden life; how they obtain supplies as well as what news they hear about the war, but she also includes information of a more subjective and personal nature. As the war unfolds and as she matures over time, Frank shares with her diary what she is learning about her world and herself. The diary holds information that is affective, personal, and closely related to Frank's inner life, information that results from Frank's particular mind or state of mind. This information cannot comfortably be called data, a word often connected to factual information. Yet this information is capable of adding to the reader's understanding and therefore cannot simply be called reading for entertainment's sake. Frank's diary holds some of the life experience and knowledge of its writer, and it can communicate this to others. Scholar Rebecca Steinitz states:

To conceive of a diary as a means of communication would appear to run counter to all our received notions of the genre. We lock our diaries, hide them in desk drawers and under beds, pour into them our innermost desires and disgusts. Faced with the diary of another carelessly left lying on a table, a sister's perhaps, or a lover's, we struggle with the impulse to eavesdrop, to pilfer, to invade. Any communicative possibility seems stolen and illicit. Against these notions, however, I want to argue here that the diary is, and has been throughout its history, an eminently communicative genre. As long as diaries have been written, they have been read, by their own writers and by others, in manuscript and as published texts. What they communicate, though, is not a message, but a particular kind of representation of experience, a representation whose structure and rhetoric enables a reader, any reader, to occupy the space of the writer, to inhabit his or her memories, making collective that which originates in the singular (Steinitz 1997, 43).

The subjective information in Frank's diary, now that it has been published, is available for consideration by others. Yet subjective information is

useful beyond simply being unverified or opinion-based data that another individual may wish to adopt or that may someday be proven. As an affective connection is established between the content of the writing and the reader, someone beyond Frank herself is able to at least partially understand Frank's vision of the world, Frank's personal World 2 as represented by Popper's model. This may also help the reader understand World 1 more fully. One of the interviewees for this thesis, Jaclyn, mentioned this quality in Anne Frank's diary, stating:

That's the kind of history I'm interested in. I remember I read *The Diary of Anne Frank* like every other kid in the world when I was, like, in elementary school sometime. I love it. That's the book that made World War II real to me.

Frank's diary makes history relevant to the life of the reader, establishes an emotional connection. When this type of a connection is made with the content of an information document, we don't immediately forget or dismiss it. Most readers can sympathize and even empathize with Frank. Creating an interested and even personal connection with information helps the information user to better process and retain that information. Yale historian Edmund Morgan touches on this idea when he states "the historian's task is to explain the past to the present, to simplify without oversimplifying, and to bring to life men and women who can speak across the centuries to their human kin (Tramposch 1994, 19)."

The previous quotation is from an article in *History News* entitled "Opening Doors To Our Appreciation of the Past." The author, William J.

Tramposch, examines successful historical interpretations in museums, methods for helping visitors learn more about history or, to put it another way, to absorb or use the information being offered to them. Tramposch notes that it is important to understand that "good education changes behavior (Ibid)." He writes about "shocks of recognition," moments of interaction with information that "shift our thinking somehow; they get us to look at things differently than we did before; and in a very subtle way, they invite us to look further into matters (Ibid., 20)." He notes that this type of learning is "more affective than cognitive," at least at the beginning stages (Ibid). He quotes French novelist and Nobel laureate Anatole France:

Do not try to satisfy your vanity by teaching a great many things. Awaken people's curiosity. It is enough to open minds; do not overload them. Put there just a spark. If there is some good inflammable stuff, it will catch fire (Ibid., 21).

Touching History

How does a journal put a spark into information? Sometimes by merely touching upon a well-known historical event. Diarist Elizabeth Forsythe Hailey recalls the thrill she felt when reading a diary of her grandmother's trip to Europe in 1913, realizing her grandmother had sailed on the *Lusitania* two years before it was torpedoed. Hailey observes, "This unexpected intersection of a little-known individual life with a large historical event is one of the delights of diary reading and gives history a welcome human dimension (Hailey 1986, 38)." It becomes evident that "every event, every historical fact, is composed in

its essence of purely human elements (Ponsonby 1923, 32).” George Templeton Strong’s 1836 to 1876 diary shows nineteenth century New York City as it was affected by such well-known social trends and events as westward expansion, Jenny Lind Mania, Southern Reconstruction, the gold rush, temperance, the construction of Central Park, and women’s rights as well as presidential campaigns from Andrew Jackson to Ulysses Grant (Mallon 1995). Mallon notes how the diary content, Strong’s World 2 articulated, inspires connection with a reader:

When the war is at last over, with the news on April 3, 1865, that Richmond has fallen, he rushes up to Trinity Church to set the bells pealing. It is one of the diary’s great moments, wonderfully told, and yet a nervousness immediately sets in with its readers. They know, even if the diarist doesn’t, what’s going to happen on April 14; turning over each of the four pages left between Richmond and Ford’s Theatre is a queasy, flinching experience. And when it happens it strikes the public-minded diarist just as one knew it would -- as a ‘fearful personal calamity’ (Ibid., 25).

Part of this revelation of the human behind the large and the well-known is the understanding that historical significant or famous figures were human beings whose flaws and joys often resemble our own. The powerful, the religious, and the erudite are brought to an understandable level. In the words of Ponsonby:

But we find ourselves drawn to people at once when we discover they are just like ourselves and did actually by their own testimony given in their own words -- and not in the great language of history -- lose their tempers, enjoy their dinner, quarrel with their families, catch cold, be elated by worldly joys, and dejected by the perplexities of human existence (Ponsonby 1923, 37).

Wynell Schamel and Beth Haverkamp, educators who advocate the use of primary documents in the classroom, note in their article entitled "Decision at Yalta" that the diary of Anna Roosevelt is highly useful in creating an effective history lesson for students. "Her diary offers many fascinating details about the conference and the man who, to the world, was President of the United States of America but, to her, was father (1995, 95)." Mallon notes that Leonardo DaVinci frets in one of his notebooks about wasting time, accomplishing too little and doing it so badly that no impression of himself will be left behind (Mallon 1995, 165). William Windham, distinguished philosopher, statesman, and British Minister for War in the late eighteenth century, confessed to his diary that "After tea I grew into spirits more than ordinary so as to make me dance and sing about the room (Spalding 1949, 29)." On another occasion, Windham describes in his diary how he and members of Parliament amused themselves by throwing stones and oranges at each other (Ibid).

At other times the "spark" provided from reading diaries grows from the ordinariness of human lives whether touching great historical events or examining only day-to-day life. Fothergill remarks on the lives of diarists now gone:

They were so concretely *there*, so firmly embedded in the centre [*sic*] of their own existences, each consciousness composing all the elements of its existence into a unique and incommunicable set of relations, with itself as the focal point of the world. One's sense of the substance of history is turned inside out. Where one habitually thought of 'ordinary lives' forming a vast background to historical 'events,' now one's vision is of the great events dimly passing behind the immediate realities that comprise an individual's experience (Fothergill 1974, 9).

Fothergill adds, "Like the best literature they extend our realization of what being alive is like (Ibid., 10)." Linguist and diary scholar William Matthews similarly observed, "only a good diary can give you the fine detail and the wondrous confusions of daily life and the feelings and momentary reflections that reveal the living reality of the period (Arkin 1983, ix)." George Templeton Strong's diary contains references to famous events and important social changes, yet these encounters are not the only value of the diary. New York is revealed through the eyes of one of its everyday citizens. Mallon notes the empathetic quality of Strong's diary, commenting that when reading the work, "the temperatures, dangers, smells, and sheer energy of the city of New York are ceaselessly felt (Mallon 1995, 26)." Why is this detail so useful? Diarist and novelist Elizabeth Forsythe Hailey explains, using the framework of her profession as a writer which also deals in language and narrative:

A primary rule for writers is a seeming contradiction: The more specific you are, the more universal. No literary form is more specific than the diary, and one that at first glance would appear to be of interest only to the immediate family can illuminate a whole society (Hailey 86, 28).

Writer Amy Vanderbilt echoes this idea in her 1990 article, "Journal Keeping for Fiction Writers," in which she encourages writers to observe their world closely and record what they experience:

The fiction writer creates a universe out of characters, situations, emotions, and problems which, to be effective, must be fundamentally recognizable to readers. This can come only from the writer's personal experience and personal truths: from being personal, it becomes universal. Where does one look for the universal? In the specific (Vanderbilt 1990, 16).

The Diary as a Democratic Form

As Miller and Miller (1995) note, diaries are a democratic form, providing informative contact with people other than dominant or famous figures (Davis 1993, Matthews 1950). The only prerequisite for creating a diary is that one be literate and have access to writing materials. Brazilian diarist Carolina Maria de Jesus, whose journal has been published and translated into various other languages, had only two years of education when she began keeping a journal on blank paper salvaged from trash heaps in the slums of Sao Paulo (Schiwy 1996).

Sometimes diaries as primary documents are highly useful in piecing together not a generic view of history, but how a specific segment of humanity experienced the past. Historian Gayle Davis observes, "Contrary to the pervasive stereotype of male heroism and female passivity that has clouded our historical perspectives on frontier life, the diaries reveal women's varied responses to the West (1987, 6)." Mallon similarly states, "The history of women is being written as much from their diaries as anything else (Mallon 1995, 19)."

By noting the uses for diaries outlined above, it is realized that these documents are useful not only as a singular look at historic events. Comparing diaries over time or searching beneath "plot" for social and cultural trends can provide rich information. Spalding notes, "On the question as to what convention will and will not tolerate at different periods, the diarist is always a valuable, and often only, witness (Spalding 1949, 80)." Diary scholar William

Matthews got interested in this writing form as a linguist exploring the everyday language that usually appears in diaries. In terms of a linguistic source, he calls diaries "unequaled" in their usefulness, "comparatively uncontaminated," and "splendid raw material (Matthews 1950, vii)." In a recent study by researcher Joan Blumberg of Cornell University, over one hundred diaries were used to observe psychological and sociological changes in adolescent American girls across time. Blumberg found discernable and mapable shifts in issues such as religion, mother-daughter relationships, courtship, and body image (Brophy 1995). Diarist DeVona, who shares the creation of a journal with her spouse, observes that "Journals can reflect cultural and economic trends. Every now and then we note which television shows we watch, or the current price of gas, or how much a cord of wood costs (DeVona 1985, 15)." DeVona adds, "According to my grandmother's 1923 calendar notes, she paid \$4 for a winter's supply of firewood. Fifty years later, we paid \$250 for a truckload of logs -- about five cords (Ibid)."

Diaries can provide a picture of the past for the reader. Sometimes that view allows the reader to observe both how the world has changed, but also how it has remained the same. "It's wonderful to see that people 200 years ago were worrying about the same things," commented one visitor to an exhibition of diaries at the Pierpont Morgan Library in New York City (Boss 1997).

The Problematic Subjective

Despite the value and uses of diaries, they, like any other World 3 informational objects, should be carefully examined and understood in context before presuming that they hold truth, are unbiased enough to be useful or present an accurate portrait at face value. On a practical level, reading a diary provides only a telescoped view of the diarist's life. Mallon notes that reading a diary is somewhat like viewing life in a sped-up fashion:

Time-lapse photography offers odd pleasures: gaudy flowers blooming in a second, skyscrapers flinging themselves upward in half a minute. Reading someone's life in one of these huge chronicle diaries can be a little like watching it that way: you go through a year in maybe an hour or two. But the effects aren't so amusing as they are with the flower and the skyscraper. Ye gods, you ask yourself, how many times can someone have breakfast? In fact, the diarist doesn't eat it any more often than you do; it's just that recording it is his tic, and by reading so much of his book at once you've got to down a couple of hundred eggs in a sitting. Life, from this vantage, seems even more repetitive than it is. What's more, a steady diet of the first person leaves anyone irritated and mainourished, eager to assert his own ego against the one that keeps coming off the pages. 'Up betimes and to my office': aw, go home, you say, having heard Pepys tell you this a hundred times if he's told you once. Read too quickly, even his life seems dull (Mallon 1995, 11).

In addition, the diarist records not everything about his or her life, but only that which interests them. Important events or aspects that would provide valuable context can quite surprisingly be left out. One example is the diary of France's King Louis XVI. On July 14, 1789, as his subjects stormed the Bastille, his diary reports only a solitary word: "Rien!" This is the French word for "nothing" (Johnson 1997, 8). Similarly, in the politically turbulent days before

Russia's bloody October Revolution, Tsar Nicholas II recorded weather conditions in his diary (Ibid).

In some cases, the body of diaries as a genre or information source may be missing segments. Although the diary is a democratic form, only the literate with means to write will have recorded their lives. In times before the Civil War in the United States, for instance, diaries of slave holders will be much more easy to find than the personal accounts of African-Americans, who were forbidden to learn reading and writing skills. As a rule, the farther back in history one explores, the fewer the number of literate individuals and the more likely it was that the literate were wealthy and male.

Not only might information be left out of diaries, however, but information may also be in some way inaccurate or biased. The introduction to *American Diaries: An Annotated Bibliography of Published American Diaries and Journals* "warns that "the prejudiced honesty of diaries must be taken as it is (Arksey et al 1983, xiv):

Diaries reflect what their authors saw and felt, not what the hindsight of history or enlightenment indicate they should have seen and felt or how they should have interpreted their experiences. Also, because we are limited to those diaries which have survived as manuscripts and, of these, diaries which someone has deemed worthy to publish, the puzzle of America as revealed through this medium does indeed have many gaps (Ibid).

Historian Gayle Davis, whose research focuses on the frontier diaries of women, similarly issued praise of diaries as useful documents tempered with a caveat:

Private personal diaries potentially contain more honest, firsthand, and immediate descriptive writing than does any other literary form. However, while it is tempting to search private journals for straightforward personal history, it is dangerous to take their contents at face value. Diaries document what a woman wrote. One should not assume, however, that the author explains herself or her experiences with any unique guarantee of objectivity or accuracy. It is well established that the diarist may not be completely forthright in her writing for a variety of reasons including the audience she expected or feared for her writing, the motivations prompting her to write, and other such factors that may limit full personal disclosure (Davis 1993, 166).

Audience

The impact of a real or imagine audience on the content of a diary may be significant. Some diarists attempt to circumvent this problem with attempts to ensure security of their writing from the eyes of others. Seventy two year-old diarist Olive Pridgen reported in a newspaper interview that she has a friend poised to come in and destroy her journal after she dies (Gordon 1994). Not only are diarists who destroy their diaries or arrange to have them destroyed protecting certain pieces of information from being revealed, but they may be wanting to hide the evolutionary processes and stages of their own growth.

Writer Daniel Harris observes an attitude that may sum up the sentiments of many writers, but that may be applicable to many diarists as well:

Writers as a tribe loathe the paper trail that has led each of us to our present position and cannot bear to examine the debris of cast-off identities we leave strewn in our wakes as we try on one ill-fitting costume after another. In fact, writers are, ironically, the worst book burners around, systematically effacing our traces, burning our diaries,

obliterating the record -- all in an effort to pretend that we have not changed, have not developed, were always exactly as you find us now, having sprung like Athena from Zeus' head, fully formed and armed to the teeth (Harris 1994, 34).

Hiding a diary is probably the most popular way of keeping an audience away, but it is not foolproof nor will a diary probably remain hidden forever. Writing content in cipher or code is another method of keeping diary content hidden. Children's writer Beatrix Potter and the famous Samuel Pepys are examples of diarists who used this method of protection (Blodgett 1991, Epstein 1985). Pepys was so successful that his diary remained undeciphered and unread for well over a century.

The five diarists interviewed were all asked "For whom do you keep your journal?" Alexandra, Elizabeth, and Jaclyn all answered some variation of "primarily for myself," with the qualification that they had descending family such as children and grandchildren in mind. Penelope, while making no mention of family, stated in hopeful terms, "I suppose I'm envisioning some future reader, my ideal reader who would completely sympathize without judging and understand everything." David, on the other hand, stated "Now, I know some people who keep it from the idea that it's historically significant and some scholars are going to want to pore over it in the future, but that's not my intent. In fact, I don't think I would want a reader."

What difference does a potential reader make? On a superficial level, the idea of a potential reader may affect the quantity or quality of information. A diarist who thinks their work is intended for their eyes alone will leave out details

such as individual's last names and specific descriptions (Bowles 1994).

Unless the diarist feels they may forget such details and includes them for their own future reference, this type of information will often be excluded. Otherwise, the potential or potential threat for a reader may cause bias. Ponsonby states:

A diary can be written with no thought whatever of the discriminating eye of a publisher, of the critical eye of a reviewer, or even of the interested or bored eye of a reader. No pause is needed for modelling [*sic*] phrases, no attention need be given to form, even grammar can go to the winds, and above all there need be no explanations. All restraints can be lifted and in the open fields of fact and fancy the diarist can browse, repose or gallop along at his own sweet will (Ponsonby 1923, 2).

On a more amusing note, writer Daniel Harris makes the following tongue-in-cheek observation of his early diaries:

Although it is central to the theater of my notebooks that the reader believes he is eavesdropping on an act of solitude, it is obvious that I am convening a kind of literary open house, a salon in which a vast assembly of admirers are huddling around my desk, listening in admiration...These are not journals in any ordinary sense of the word but memoirs incognito in which I stage-manage my own image, already thinking ahead, at the tender age of seventeen, to the sort of documentary evidence a budding celebrity would need in order to prove his embryonic greatness to unborn fans (Harris 1994, 34).

There are advantages to a perceived audience, however. One advantage is that a diarist may endeavor to be as objective as possible in approaching problems, searching for many viewpoints so that a future reader will not think them selfish or so that posterity may show that they did at least note some semblance of a later-revealed truth. While this doesn't particularly aid the reader, it is a great advantage to the diarist during the processing of information or the solution of a problem, facilitating viewing the information or

problem from various angles. Another advantage of a potential audience, one that does benefit a reader, is that a diarist may begin or persevere with a journal for the future use of others when ordinarily they would not have written in the same way or would not have written at all. When Anne Frank heard a government official asking the public to keep diaries and letters for the preservation of history and culture, she began rewriting her journal of two years into a form she felt could better be appreciated by readers. It was this version that Otto Frank, Frank's father, presented for publication after her death. Subsequent versions of the diary relied on both versions as well as passages that had removed by Frank's father (Frank 1989, Pons 1989).

While various versions of Frank's diary do exist, this is a rare case. Most diaries exist in their original form and a comparison between an actual journal and a hypothetical journal that might exist if the reader was sure no eyes but their own would ever see the document can only be entertained rather than understood. It is impossible for any reader or even any diarist to know what a diary might actually be like if the absence of an audience was completely assured. If the interviews conducted for this thesis are any indication, it may be that omission rather than known bias usually take place when an audience is perceived. The five interviewees were all asked three questions: "How revealing is your writing?" "Would you say that there are things you will not reveal even in your journal?" and "Would you say that there might be conditions under which you would falsify information in your journal?" Alexandra seemed to represent the other women interviewees with her statement:

I've been pretty frank in my journal. I think there are times when I wish I had been more frank in the past or that I had written more in-depth in the past. I think that I reveal most things. There are probably a few things that I wouldn't feel one hundred percent comfortable writing it down because I think I'm just not...I don't think I'm comfortable enough to articulate it yet. Just not even outside of my own head.

David's response echoed the sentiment, but his answer included the reality of his objective notebook as a separate volume from what he called his "sensitive" work: "When it's personal it's very revealing, but only occasionally will I put those kinds of thoughts into my journal. Most of the time it's pretty dull stuff. But when I feel the need to vent, it is personal." As for the issue of falsifying information, Elizabeth seemed to sum up the sentiments of all five diarists with her simple statement: "I just won't address the issue if I feel I can't be honest." For all five interviewees, omission was the preferred solution when they fear negative implications should their writing be read.

Of the four diarists interviewed that indicated they would like some sort of future reader or audience, all indicated an interest in, as Penelope phrased it, "sharing life, sharing experience." Both Alexandra and Penelope spoke of themselves as possibly representative of their roles or experience in life. Penelope, who is a teacher, responded this way when asked what use she would like to see someone someday gain from her writing:

The same use I get from other people's, which is interest, first of all. I worry about that a lot. Is this interesting to anyone but me? Seeing how I, as a representative woman, human being, wife, mother, teacher, whatever, works through whatever, solves things or expresses things. But I guess that's what I get from literature anyway, so I'm thinking of it as literature, probably. Or the human side of what literature has to offer.

Although Alexandra seemed quite serious about the topic as a whole, she joked about what her journal might bring to the future:

I don't know. That's a really hard one. I don't think my journals are the stuff that ought to go into a library or something. I would hate for someone to find my journal and think, 'This is what the typical African-American woman was like.' (laughs) I'm so atypical that I would skew off all the research, ruin someone's Ph.D. Ruin their entire reputation.

When asked what information she hopes others will glean from her journal if it was read or published someday, Alexandra responded:

I would hope that someone would just get an idea what an average person's life was like. Although I guess I don't keep enough about what I do from day to day, so it can never be a great cultural or social work or resource. But I would hope that maybe younger girls, teenaged girls, reading it would realize that life isn't going to be perfect. There are going to be mistakes that you're going to make along the way. You're not going to like yourself all the time, but just because you don't like yourself now doesn't mean you have to hate yourself or that there's nothing you can do about it. You make your own destiny.

Elizabeth made similar statements, yet she also took the idea to a more immediate level:

I think my number one hope for it, my number one desire for it, is for people to understand who Elizabeth is. And it's really...it's not really even to teach. I think we can all learn something if we choose to, but what I guess I want them to take away from it most is who I was. I imagine not many outsiders are going to be reading this. Anyone who's going to have the desire to read it will want to know who Elizabeth was, hopefully, and getting to know who I am in all the different facets. We're all so complicated. And it's hard to...I don't think anybody knows us completely, but my journal does. It knows my greatest weaknesses, my greatest fears and strengths and desires, things that don't necessarily get told to everyone. Everyone knows little bits and pieces, but the journal knows it all.

As we have seen, there are benefits to having or perceiving an audience as well as negative consequences. For scholars, it is an interesting variable. But what is the best recommendation for diarists who feel they must address writing to someone? Tristine Rainer, who has taught many journal-keeping workshops in addition to keeping her own journal and writing about journals, recommends that the diarist envision an audience as a future self:

If you think of your reader as the person you will be in five or ten years, it will encourage you to write concretely and to include details that make the experience interesting to reread. In ten years you won't remember the situation unless you capture all its sensual vitality now (Rainer 1978, 39).

To sum up some of the main points about diaries as sources of information for outside readers, Anne Frank's diary can again be helpful when used as an example. First, when Frank addresses ideas or subjects in a way that is largely independent from her own mindset or emotions, particularly when these elements are verified through comparison with other sources, her diary becomes a source of relatively objective information. Second, her diary also is a source of subjective information, the opinions and musings of an individual that may or may not be useful to others. A third use of the diary by others, which is closely connected to the second, is to provide an affective aspect to information, to facilitate a reader's understanding by helping to them to personally and emotionally connect to the author and the information conveyed.

DIARIES AS PRODUCTS: INFORMATION OBJECTS FOR DIARISTS

Reference Source and Memory Prompt

Robert S. Taylor, in his 1968 article "Question-Negotiation and Information Seeking in Libraries" notes that when attempting to answer a library patron's question, the body of information that aids in finding the answer may not be the typical sources one might expect:

It should be understood that the 'files' refer not only to the catalogs, indexes, abstracts, and other standard files of the library. There is also the 'who knows what' file, not on cards but in the librarian's memory. There are special files: previous requests, news items, recent items read, the unstructured notes (or pieces of paper napkins) in the librarian's desk drawer (Taylor 1968, 186).

Related to this idea is an article written by information scientist J. D. Bovey for the *Journal of Information Science* entitled "Event-Based Personal Retrieval" (Bovey 1996). In this article, which uses the word "personal" in a broad sense, he notes that "Although most retrieval systems are aimed at collections of documents such as research papers or reports, many people handle quite large amounts of information in the course of their working lives, and these collections of personal information can easily be large enough to become unmanageable without some kind of retrieval aid (Ibid., 357)." Like the library "files" Taylor is referring to, this information differs from many other types of information in that it was once known by the searcher.

Bovey states that personal information falls into two broad classes: events (which includes details specific to those events) and documents (such as the content of a research report the individual read some time ago). While journals may include citations for documents of personal interest or even contain some of these documents themselves (especially if the diary is kept in loose-leaf format), of primary interest is the information related to events.

Bovey determines that:

Events are things that happened in the past and are the information that would be recorded if we kept a careful personal diary. A complete event record would include details of where we were, who we were with and what we were doing at any time in the past (Ibid).

He further observes that "The most natural way to retrieve events is by their time, either absolute or relative to other events (Ibid)." Included by Bovey are examples of typical queries: "Who else was at the meeting last week in Bill's office?" or "Who was the student who came to see me last week after the algorithms lecture?" (Ibid)." The remainder of Bovey's article outlines Information Science projects attempting to satisfy personal information needs including attempts to merge diaries with computerized document retrieval systems and "active badges," sensors worn by an individual that records when he or she are in contact with specific people or places.

While journals can be quite helpful in answering personal questions about dates, times, and other project particulars; researchers Joanne E. Cooper and Diane M. Dunlap, authors of "Journal Keeping as an Example of Successful Reflective Practice Among Administrators in Government, Business, and

Education,” note the existence of another useful type of diary reference (Cooper and Dunlap 1989). Previous journal entries can be used “to remind themselves of how particular problems were solved and to reassure them that they can find a way out (Ibid., 10). The journals “operate as data banks of possible workable solutions and moral support at points of exhaustion or despair (Ibid).”

Diaries offer an excellent, although not foolproof, means of recording and storing personal information for later retrieval and use. The quantity and quality of the information is dependent upon the diarist’s discipline and skill in creating the record, but for those who create quality records, they can prove to be invaluable. Earlier in the thesis, it was noted that one of the interviewees, David, found a diary necessary when he needed to keep track of event-related information details such as “Which sponsor has asked me to come to Philadelphia?” This information is often most useful within a short period of time after recording, yet when David returns to old projects, he needs access to older information. He notes that the chronological order of the diary is quite helpful in the search process. By putting needed information in context much as Bovey noted, David usually finds what he needs.

Elizabeth also stated that her journal was often used as a reference. She laughed, “Oh yes. Easily. My family knows that I will pull out a journal to settle something.” Like David, she finds information by chronological order and by context. If she is not sure of order or context, she uses her daily calendar as an index to provide a date; once she knows when the related event occurred,

she goes to the correct journal volume which will most likely contain greater detail than her calendar would provide.

Penelope said that she used her journal to remember specific details about travels. Alexandra felt that she was just beginning to grasp the potential of the journal as a personal reference source, stating that, "I realized I don't have a very good memory, and that's why I started to really pay more attention to my journal, write down people's names and dates and stuff." Jaclyn was the only diarist interviewed that didn't feel her diary was useful as a reference. When asked if she used it to answer personal or general information needs, she stated:

No. I mean, I have a really good memory. I'll remember. When did you go here? I'll just remember. I don't have to be, like, 'Oh, I'll check.' I don't keep it like that. I don't keep my journals as a reference.

It may be that Jaclyn, at the age of 21, has not reached a professional point of need similar to when David found himself trying to keep track of multiple projects, a point that forced David to begin keeping his diary. Or, Jaclyn's diary may simply be for purposes different from David's; whereas David tends to keep track primarily of objective information, Jaclyn is recording information that is much more subjective and much more personal.

Subjective Diaries: Repetition and Patterns

Depending on how the diarist uses their work or what types of information they include, a diary may help individuals answer personal reference queries for events related to the individual's professional or academic life such as "Who else attended this meeting?" or "Who called me about this project?" A diary may also help individuals answer personal reference queries for events relating more to their personal life such as "What restaurant did we eat at on my birthday last year?" or "What did we do on our vacation ten years ago?" Writer and diarist Aletha Jane Lindstrom wrote in an magazine article about diaries:

A diary serves as a convenient, reliable reference. I'm reminded that we had ten for dinner last Thanksgiving and I read, 'Fifteen-pound turkey too small.' Nothing earthshaking about that, but extremely helpful to the cook -- me -- whose family looks forward to cold turkey sandwiches (Lindstrom 1989, 159).

But a diary can also be used to recall information that is even more personal and more subjective. A diary can help to answer questions such as or "How did I view this problem when it first began?" or "How has my attitude on this matured or changed over the years?" Historians and social scientists can read back over diaries to look for changes and observe patterns. This is also possible on a smaller scale, in the context of a single diarist's work or even a single volume of a diary. And this is possible not only for an outside reader, but for the diarist themselves. In an article entitled "Going Back Through My Journals: The Unsettled Self, 1961-1986," diary scholar Gloria Bowles notes, "I

have come to see that journals are tricky on many levels: they are linear in the sense of being chronological, yet they double back upon themselves, establishing patterns (Bowles 1994, 256)." In a more poetic fashion, diarist and writer Diana Abu-Jaber articulates a similar observation:

Reading old journals and outline notes helps me to see what richly layered beings we are. I recognize odd currents in my work and images, patterns, as if we were each embedded with private themes, symbols that could help unlock the mysteries of our existence (Bender 1997, 1).

Sometimes a diarist who is undertaking a rereading of journal volumes will look for a specific pattern. Alexandra recalled going back through her journal to address a particular interest:

Recently I went back and looked at some of the entries a year ago regarding how I felt about my now-fiancé. It was right before we got engaged and I was thinking to myself, I think I'm really serious about this guy. He's really what I want to do. Looking back, I wanted to find out what had been bugging me a year or two before. I wanted to see if there was any kind of pattern, if there was anything that was sticking out that bothered me then and is still bothering me now. Either I could resolve or know it was never going to be resolved.

At other times, diarists who reread may not be looking for a specific thread, but, rather, for more general information. The diarist may approach their previous writing with such queries as "What was I like when I was a teenager?" or "Was that period of my life as tough as I remember it?" These types of queries are about knowledge, but a type that can be called *self-knowledge*. It is an attempt to grasp the knowledge base, the individual's World 2, in a holistic sense and in direct relation to the individual's experiences, mind-set, personality, and world view. Self-knowledge involves metacognition and an

understanding, either conscious or unconscious, that the knowledge of an individual cannot be completely disconnected from that individual as a unique human being. The information is extremely subjective, but it is of great importance to the diarist and has tremendous impact on how that individual perceives, receives, and uses outside information.

When asked about rereading old journals, David, whose notebook, in general, is quite a bit more objective in nature than the other interviewees, described renewed projects that he had to go back and research in his notebook. He reported rarely having to go back more than six months' worth of entries but that the last month's entries were used quite often. The other diarists interviewed, whose diaries tended to be more subjective, reported rereading their journals sporadically, almost as one might leaf through a photograph album when in a nostalgic mood. In response to the question, "How often do you reread old entries?" Alexandra said:

Not that often. Not on a really regular basis. Maybe...I don't have all my old journals with me where I'm living now. But a couple of times a year, maybe I'll go back. I haven't lived at home, at my parents' house, in a really long time and that's where most of my stuff is. If I stumble across something when I'm cleaning up or sorting through things, a box of books or something, I will open it. Probably about five months ago when I was there I went through some stuff. It's sporadic.

Elizabeth indicated that holidays are often causes for rereading, particularly because she will sometimes read sections of her journal to her family during times when they are all gathered together. She estimated that for herself, she reads some portion of old entries every three or four months and

described her motivation as "if I'm wanting to remember a specific time." She states that often her rereading is an attempt to recapture memories:

Since I have a journal now that's taken place over twenty years, I can go back and remember a time in my life. If I want to be eleven or ten or twelve again, I'll go read that time period and try to remember what it felt like to be that person at that time by reading those journal entries.

Jaclyn discussed the idea of abstaining from reading journals regularly so that she would not remember as much about what she recorded. She called this "fun" and indicated that fading of memory would afford, in essence, a joy from rediscovering forgotten parts of her own life. In addition, she stated that distance from her words allows greater objectivity:

I also think you have to separate yourself from the incident to really make sense of it all. You know, at first you're just copying it down, then later.... I don't know. I don't really have a set time limit. I just read them whenever I feel compelled to.

Penelope reread her journals less than the other diarists interviewed.

She indicated that she did reread newer entries, however:

Not very often. Years go by and I don't. So, maybe every few years. Certainly not all the time. Usually when I start writing again, I'll go back and see what the last few things were that I wrote.

When the interviewees were asked about patterns or repetition perceived when rereading old entries, David spoke of reusing information recorded several years ago about a particular project that has recently been rekindled. The other diarists responded to this question within the framework of highly

subjective entries. Penelope and Jaclyn both recalled patterns revealed in their diaries that relate to ongoing relationships. Penelope noticed:

One example is when I teach the class [on journals], I've always managed to avoid...I have my students copy pages from their journal to share with the class. They get to choose what pages. And I've always managed to avoid doing that. But this last time, last spring, some students pinned me down and I guess I finally thought, "Well, it isn't really fair. I need to put myself out there the way they do for me." So I did. And I really went back through I guess all of them. And what I found was particularly ups and downs in my marriage. And I think my students...and I decided, okay I'll really make myself vulnerable. I copied pages from both kinds, highs and lows, and I think it shocked my students. So that's one kind of pattern. Certainly patterns with weight gain and loss and how I feel about it. Family. Family matters. Both my children or parents or parents-in-law or sisters.

Penelope also added that she found it interesting while rereading to compare how she addressed "intellectual or ethical issues" in the past with how she felt about them in later entries or at the time of rereading.

Jaclyn, like Penelope, mentioned her family as a recurrent theme but also noted that other concerns might be similarly repetitive. She stated:

Oh, yeah. I mean, there's always repetition because usually when you're going through something, you don't go through it in one entry. I mean, you go through it over time. There are certain things that follow you throughout, there are certain things that will always be on your mind, you know. And your family is always your family.

Elizabeth didn't mention family or relationships, but she did notice, like Jaclyn, that repetition in the journal may follow unresolved issues. Elizabeth compared these repetitions to "draft-work" and "rewriting different drafts." For most types of writing, rewriting a draft consists of actually reworking the previous version (Murray 1978). In the journal, however, "rewriting" is

addressing the same issue in a new entry, although perhaps with new understanding or a different perspective. Ideal resolution for most types of rewriting is the point where a copy is achieved that doesn't need further changes. In the journal, this is somewhat different as well:

Oh, there's a lot of repetition. I repeat myself a lot. One entry doesn't really resolve a problem necessarily. The same issues keep coming up. Life isn't a sitcom where it's over in a half-hour and everything has been solved. I find I have to keep repeating things to get them out. Fortunately, I don't get sick of it. I mean, when I do get sick of it, it means I've finally resolved the problem, can move on to something else.

Elizabeth added that even when she feels an issue is resolved and finished, it may come back at a later time. She also stated:

I think the overwhelming pattern, thing that I found in looking back at my old journals is that I'm essentially the same person that I was when I was six. A lot of my attitudes and personality...I've grown and changed, but there are basic and inherent things that are Elizabeth. And they haven't changed. I can read things that I did when I was twelve that were much more immature probably than what I am now, but there is still that basic, underlying personality. And that's the biggest pattern that I've seen.

Alexandra also seems to feel that "who I am" is the single greatest and most important pattern that reveals itself in her diary:

I do see who I used to be and I can tell where I've come through and what parts of my personality do still...I guess the foundations of my personality, what made me a strong person or what makes me feel weaker or more vulnerable.

Cycles and Spirals

When judged by an outside reader, repetition can be an annoying aspect of a journal, as Mallon noted when he wrote of the time-lapse photography effect of diaries and how reading a diary quickly can lead to the impression that the diarist is experiencing life in a way more repetitious than other individuals (1984, 11). Journals, however, usually *are* highly repetitive in nature (Bowles 1994, Mallon 1995, Miller and Miller 1995, Ponsonby 1923). This can lead a reader, outsider or creator, to wonder if the diarist is merely going in circles (Rainer 1978). In a sense, this may be true, especially if the diarist found no resolution. What this actually reveals, however, is the anomaly cycle mentioned earlier in the thesis.

The anomaly cycle, a circular collection of steps to move the individual from an information need to a new knowledge structure, consists of articulation, searching, and integration of information. These steps are a process that can be seen in a diary. While it makes sense to discuss this phenomenon in the next section of the thesis, which addresses the journal as an information processing tool, the evidence or record of this phenomenon is often what readers are looking for, so it will be addressed in the present section instead.

Education researcher Robert Yinger authored an article entitled "Journal Writing as Learning Tool" (Yinger 1985). In this article he outlines an idea of learning through writing that is strikingly similar to Brookes' anomalous state of knowledge (Brookes 1980) and the anomaly cycle, although it was discovered by this researcher after the development of the anomaly cycle:

By writing out what is known and by juxtaposing this knowledge with other pieces of knowledge to create new connections, new relations and structures come into being and new knowledge is created. This same process makes evident the gaps or inconsistencies in one's knowledge, which in turn may promote further learning and reorganization (Yinger 1985, 25).

Remarking on the diary she kept as a teenager, Gloria Vanderbilt states, "I kept expecting my diary to give me the answers when all it really did was make me ask more questions (Vanderbilt 1996, 78)." Vanderbilt's diary was recording her steps through the anomaly cycle, or perhaps even leading her through it.

The idea of the anomalous state of knowledge, as was mentioned earlier, is linear. The anomaly is articulated, researched, then new information is applied. When the new knowledge structure leads to further questions, Brookes' equation becomes an anomaly cycle. The model of the cycle, however, should probably be expanded to allow for greater comprehension. If the anomaly or problem being addressed is a complicated one, it may be explored without being resolved. The information search can be thought of as "going in circles." Like a foxhunt where the hunters find themselves constantly retracing their path, the information seeker constantly retraces his or her steps without reaching new understanding or resolution. This is different than the case of an individual that may be dealing with the same problem, but that has new information which helps them address the problem at a higher, more sophisticated level. A successful anomaly cycle may not bring complete resolution, but it lifts the searcher to a new level of understanding based on an

expanded knowledge base. It has become an anomaly helix or spiral as can be seen in Figure 4.

In her book on women and journals, Marlene Schiwy addresses the idea of the spiral as it can be used on a subjective and highly personal information need in poetic and metaphorical terms:

Many women describe the course of their life's journey as a spiral. Circling back to the familiar before sweeping ahead to the unknown, the spiral moves forward by moving backward, goes up by going down. In contrast to the relentless forward drive of the masculine 'line,' the spiral incorporates periods of returning to our childhood wounds before proceeding ahead with fresh insight and energy. At the best of times, this journey may involve 'moving back and down' into our Shadow -- our unacknowledged dark side - in order to face our demons, before moving ahead into the light of new growth (Schiwy 1996, 44-45).

Schiwy adds:

Over and over again, in the work of women writers, the spiral serves as the symbol of a nonlinear creativity that encircles familiar territory while moving ahead into the unknown (Ibid).

Although she does not mention a spiral structure, Rainer notes a similar phenomenon:

Diarists, on rereading, sometimes interpret the reappearances of a problem as lack of growth. But once you have acquired the habit of unblocking and moving the negative energy of a particular problem forward, transforming it into constructive energy through your work in the diary, you will begin to see a long-term pattern of change (Rainer 1978, 149).

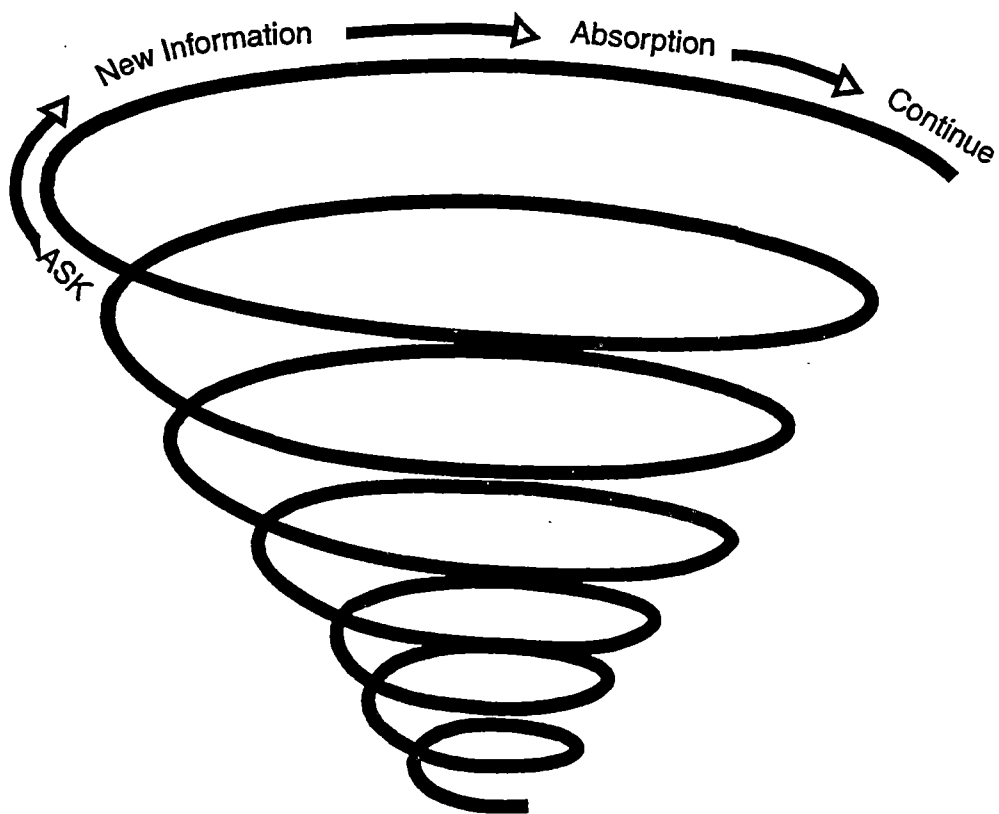


Figure 4. The Anomaly Spiral

As Schiwy alluded, the spiral as a model for growth and learning is an established one. In his book *Practical Research Planning and Design*, Paul D.

Leedy uses a helical model to describe the formal research process (Leedy 1993). Another use of the spiral is by the Catholic Education Board in a English curriculum based on perception, engagement, evaluation, and interpretation (Catholic Education Board 1968).

The anomaly cycle or spiral is highly useful to solving problems and recording the process in a journal allows the diarist to go back and see patterns, observe how the problem at hand unfolded over time. This can help move the problem even further along, up the spiral, if it has not already been resolved. Sometimes, however, diarists can come to fear this very quality of journal keeping. The messy, untidy process has been preserved. It can remind the diarist of painful past experiences and slow growth. Lord Byron, who kept a diary from 1813 to 1821, wrote, "This journal is a relief. When I am tired -- as I generally am -- out comes this and down goes everything. But I can't read it over; and God knows what contradictions it may contain (Spalding 1949, 45)." Sometimes contradictions are the result of sloppy composition when writing, but at other times there are that point in the anomaly cycle or spiral where new information is found to be inconsistent with the existing knowledge base. The embarrassing contradiction may actually be a necessary part of the learning process made visible. The worry, however, is that the recorded learning process will reflect poorly on the diarist, embarrass them with a record of "who they used to be."

Earlier in the thesis, a quotation by writer Daniel Harris was used to describe one reason why diarists might destroy their work. The full quotation, which is also related to the topic at hand, states:

Writers as a tribe loathe the paper trail that has led each of us to our present position and cannot bear to examine the debris of cast-off identities we leave strewn in our wakes as we try on one ill-fitting costume after another. In fact, writers are, ironically, the worst book burners around, systematically effacing our traces, burning our diaries, obliterating the record -- all in an effort to pretend that we have not changed, have not developed, were always exactly as you find us now, having sprung like Athena from Zeus' head, fully formed and armed to the teeth. We attempt others into believing that there was no self-experimentation, no posing, no lying, no insincerity, that we were born with a fully evolved style...But because neither our personalities nor our prose styles are emanations of an intrinsic sensibility, such a view seriously misrepresents the task of self-construction, which invariable involves insincerity and impersonation, the petty thefts we make when we mimic those who have a stronger sense of selfhood than we do. To believe otherwise, to burn our diaries, to turn our backs on the selves that we have been in the past, is the ultimate act of self-betrayal...(Harris 1994, 34).

An essay on personal notebooks by Joan Didion similarly declares:

I think we are well advised to keep on nodding terms with the people we used to be, whether we find them attractive company or not. Otherwise they turn up unannounced and surprise us, come hammering on the mind's door at 4 a.m. of a bad night and demand to know who deserted them, who betrayed them, who is going to make amends. We forget all too soon the things we thought we could never forget (Didion 1966, 139).

Didion adds, "It is a good idea, then, to keep in touch, and I suppose that keeping in touch is what notebooks are all about (Ibid., 140)." A more positive note comes from writer Naomi Shihab Nye:

When I look back at the passionate, melodramatic notebooks I kept in high school, I feel they are a clear, definitive map of those kooky years. Memory alone offers slim tints and echoes. Notebooks fill in the whole

rich body of the story. Some people don't want the body anymore. I certainly don't want to read it very often. But I like to know it's there if I need it (Bender 1997, 238).

Awareness and Perceptivity in Memory

While rereading subjective, personal journal entries can help reveal patterns and aid the diarist in putting elements in perspective, it can also help the diarist relive specific moments. Instead of answering only information needs such as "Why did I feel this way?" or "How did this condition develop?", the diary can also answer queries such as "What was it like to be present at that moment?" In the earlier exploration of the diary as a primary document sometimes available to outside readers, it was stated that the subjective nature of the diary can help to establish a connection of interest between reader and content, between reader and writer, and even between reader and history. In a similar vein, diaries can help maintain the diarist's interest in their knowledge base, their own life.

William F. Brewer's article "What is Autobiographical Memory?" observes that there are three types of autobiographical memories (Brewer 1986). The first is *personal memory*, a mental image corresponding to a particular event or episode. The second is *autobiographical fact*, a piece of information with no accompanying imagery. The third is *generic personal memory*, a mental image that has been generalized so that the image is not of any specific moment. While some diarists are interested in more objective information and address

primarily autobiographical facts, others may wish to record personal memories by describing events in their journals or develop general personal memories by writing about conditions.

Detail added by the diarist provides additional information for any type of journal entry. For an objective entry that is largely professional in scope, adding a meeting time or a paraphrasing a phone conversation gives the diarist a greater body of useful information. For an entry that pertains to the diarist's personal life but is still somewhat objective, the addition of a person's last name or the name of a restaurant visited may later prove useful. And even for subjective entries, ones that can be considered deeply personal, the addition of detail helps the diarist later understand what they wrote. In her advice to diarists, Rainer cautions, "You will get as much out of diary writing as you bring to it. One of the major disappointments for diarists in rereading their old journals is the impression that they only stayed on the surface of a problem or on the surface of a life (Rainer 1978, 37)."

A still more subjective type of journal entry, or an element that may be part of other types of journal entries, is one that is so full of detail so as to be almost pure description. This type of entry can seem more like literature than information, a type of writing that attempts to inform the reader by showing rather than telling. Detail appears as adverbs and adjectives or hides in symbol or metaphor and serves to help the reader, outsider or the diarist at a later time activate their senses, share in seeing, feeling, smelling, and tasting the moment. In addition, the bits of information that are perceived as useless are

left out. Cooper calls metaphorical language "condensed telling" (Cooper 91, 101). Similarly, Rainer notes:

Because description captures the sensual details of experience, it can provide the most pleasurable diary passages to reread. Diarists can describe people, places, aspects of nature, human interactions, works of art, books they have read, or films they have seen in a way that is more interesting than the actual experience because they select the interesting details and leave out the dull moments (Rainer 78, 57).

An example of this type of descriptive writing can be found in the June 28, 1838 entry of Ralph Waldo Emerson's diary:

The moon and Jupiter side by side last night stemmed the sea of clouds and plied their voyage in convoy through the sublime Deep as I walked the old and dusty road. The snow and the enchantment of the moonlight make all landscapes alike, and the road that is so tedious and homely that I never take it by day, -- by night is Italy or Palmyra. In these divine pleasures permitted to me of walks in the June night under the stars, I can put my life before me and stand aloof from its honor and shame (Perry 1938, 133).

Underlying the descriptive journal entry is what Spalding calls a "belief in the value of experience for its own sake (Spalding 1949, 74)." And it must be remembered that "experience" in this sense of the word is an individual's knowledge base, their World 2. Expressing experience is articulating knowledge and is involved intrinsically with information even if it looks different and serves different functions than what may normally be thought of as information. It may be thought by some that Information Science does not or cannot overlap with literature. However, composition researcher Donald M. Murray provides an argument for this in an essay on writing composition and revision processes:

I think we forget that writers in all forms, even poetry, especially poetry, write with information. As English professors and linguistic researchers, we may concentrate on stylistic differences, forgetting that the writer engaged in the process of internal revision is looking through the word -- or beyond the word or behind the word -- for the information the word will symbolize...Writers can't write nothing; they must have an abundance of information. During the process of internal revision, they gather new information and draw on it. They discover what they have to say by relating pieces of specific information to other bits of information and use words to symbolize and connect that information (Murray 1978, 93).

Writer Elizabeth Woody wrote, "Poems are devices to recall important information (Bender 1997, 320)." Spalding notes that the diary does function similar to poetry, stating "It puts us in touch obliquely, as a poem does, with a reality beyond the logical content of the words (Spalding 1949, 58)." Describing Francis Kilvert's 1870 to 1879 diary, Spalding notes:

He describes the morning of Sunday, May 22, 1870, as it appeared to him at Langley Burrell, Wiltshire, but in the detail of his description, perfectly chosen and fittingly expressed, he has distilled the essence of innumerable English summer days. In this power of evocation the diarist at his best joins hands with the poet. For a lyric, too, is often no more than the crystallization in a single vivid image of innumerable similar moments of experience, or similar states of mind (Spalding 1949, 60).

Writer and diarist Joseph Epstein similarly notes that this phenomenon takes place in the journal:

Most of life is so dull that there is nothing to be said about it," E. M. Forster wrote in *A Passage to India*. I could not disagree more. I find keeping a journal quickens life; it provides the double pleasure of first living life and then savoring it through the formation of sentences about it (Epstein 85, 23).

Rich, descriptive, even metaphorical writing may not always offer just a "slice of life," however. This type of language may also be used to address information

that is amorphous, difficult to describe except in symbolic terms. Rainer included the following journal entry in her book *The New Diary*, an entry written by a woman just after her divorce who is attempting to make sense of her new situation and come to new understanding:

I curl into a foetal [*sic*] position. I curl into myself. I search for that silent stream that I have always had, the life that flowed to me from my mother. I block out the sounds outside and search for the sound of my stream, the almost silent, continuous stream of self which has gone on and on from the beginning that will take me to tomorrow, to the next week and to the year when I will have forgotten to miss him. I become a cell of myself and ride my stream into sleep. The stream widens into a landscape of dreams, a landscape of all time in one, all days within one, all selves within one, all loves within one, the land of opposites and transformations, the land where endings and beginnings exchange masks and meanings, where my own future kneels within me (Rainer 1978, 118).

This entry leads to another aspect that should be addressed. It is misleading to think that descriptive journal entries are involved only with “savoring” moments, a word which implies pleasure. The highly-subjective, detail-rich entries that can serve as literature can also resemble literature in that subjects are not always beautiful or sublime, as two published diaries show. Bosnian teenager Zlata Filipovic kept a diary from September 1991 to October 1993 primarily about the detrimental effects of war upon the lives of her family and country (Filipovic 1994). Brazilian Carolina Maria de Jesus’ diary focuses on her survival in the slums of a large city (de Jesus 1963).

Raw Material

Sometimes material in journals will be used by the diarist for purposes beyond their own use yet before the eventual use of a distant imagined audience. In order to compile *The Writer's Journal: 40 Contemporary Writers and Their Journals*, editor Sheila Bender asked writers to send passages from their journals along with commentary (Bender 1997). The resulting work often shows or explains how the writers not only use their journals to serve as a personal reference and jog their memories, but also how some of the journal text is lifted and placed directly into writing projects. Sometimes journals help writers produce rough drafts; at other times an especially successful diary entry will become part of a novel or essay in the same form as when it appeared in the diary (Johnson 1997, O'Neil 1996, Vanderbilt 1996).

Of the diarists interviewed, David, Elizabeth, and Jaclyn reported using journal content directly for raw material. They are also the three self-proclaimed writers out of the five interviewees. David uses his notebook, although a separate volume, for writing short stories which are then available for other use. Of his more objective volumes, David reported scanning pages onto his computer for storage as part of project files or for electronic shipment to colleagues collaborating on his projects. Elizabeth stated that she mines her journal entries for blocks of text to use in letters or fiction projects. Jaclyn is currently writing a novel in diary form, directly using some passages from her journal.

A slightly different use of the journal as "raw material" is presented by Alexandra, who uses her writing as a starting point for discourse:

I have read stuff out to people. And I have read things out to my fiancé. Or especially when really bad things happen, a fight or something, I'll have stormed out with my paper, sat out in the freezing cold of the porch. Later I'll come in and wake him up and say, "Here, read this! This is how I feel! I can't tell you, you'll just have to read it!"

Elizabeth notes a similar manner of using what she's written:

Things definitely get recycled. I bring in things. I think the biggest thing is that I'll sort out feelings and thoughts before I tell anyone else. And then I'll work it out through my journal and end up using up what I figured out about myself in my journal in conversations and with people that I'm discussing those issues with. I quote myself and nobody realizes I'm doing it but me.

Elizabeth stated, however, that this use of journal content may not be hidden if she is talking to someone else who keeps a journal. The shared content of the diary, either paraphrased or quoted, is processed information ready for use. Noting the involvement of the journal lets another diarist know that the idea being presented isn't completely unformed or without importance. Time and effort has going into the subject at hand in the form of journal writing. Elizabeth reported a recent conversation with her sister, also a diarist:

When she called to tell me about this relationship she's trying to work through a few weeks ago, she said, "Oh, I can tell you what I wrote in my journal about all this." She'd already worked things out in her mind and was trying to decide if that was how she really felt and she wanted to repeat those things. And she was. I could tell that the things she was saying were things she had worked through. She'd say, "I wrote this about this," and things like that. That's the way our conversation went, it was what we had written and what we were saying at the same time.

THE DIARY AS A MEANS OF PROCESSING INFORMATION

Diaries, Process, and the Affective

The idea that diaries involve both objective and subjective information was addressed in the previous discussion on diaries as information objects or products, as well as in other parts of the thesis. In particular, it was shown that journals exist on a continuum with more objective journals being valued more as a product and more subjective journals being valued more as a process. Not only is the subjective journal more personal in nature and usually more valued as a process, but the processing of information in this type of journal is also more affective, involving emotion on the part of the user to a greater extent. This is often expressed in emotive terms by many diarists when they describe their diaries. Alexandra stated in her interview that she keeps a journal mainly to "preserve my sanity" and so that she can "hash things out without annoying my friends." She looks back on her old journals as a place where "I was allowed to be a tortured soul." Jaclyn reported "You always feel better after you write. Even if you don't feel good, you feel better." Writer and diarist Joseph Epstein notes:

...when I do write something in my journal, I feel rather more complete, in the way I suspect an observant Moslem might feel for having done his ablutions. Not that journal writing elevates me -- it doesn't -- but I do feel upon having made an entry in my journal as if I have done my duty, completed, in effect, an act of intellectual hygiene (Epstein 1985, 26).

"Writer and diarist Heidi Vanderbilt uses the word "play" when she describes writing in her journal, pointing to "fun" created by a sense of liberation in her writing (Vanderbilt 1996, 77). Writer and diarist Debra Gordon, in a recent article on diaries, illustrates her writing process as "the sensual solitude of popping in some jazz, lighting a candle and incense, and curling up on the couch with a pen to write for an hour (Gordon 1994)." All these diarists are touching on aspects of the journal as a process, yet using affective and somewhat ambiguous language that doesn't describe the process itself in detail. It is our present task to not only identify and examine various aspects of the journal process, but also to go beneath the affective language and emotional content so that the mechanics of the anomaly cycle or spiral can be applied for greater understanding and so that the diarist's possible motivations for writing can be revealed.

Previously, Anne Frank's diary was used as an example of an information object, a World 3 document representing Frank's World 2, that contains both information that can be labeled objective and information that can be labeled subjective. For all the reasons described, and most likely other reasons as well, the diary is a well-used and even well-loved information object. But although these reasons may justify the diary's existence for the reader, it does not explain the diary's existence for the creator, for Frank herself.

Writing Practice

One clue to why Frank kept a diary is the fact that she wished to pursue writing as a profession when she became an adult. Alexandra Johnson, author of *The Hidden Writer: Diaries and the Creative Life*," notes the following passage from Frank's diary:

You've known for a long time that my greatest wish is to become a journalist some day and later on a famous writer...whether I shall succeed or not, I cannot say, but my diary will be a great help (Johnson 1997, 4).

Writers often use journals not only as a product, a place for notes to jog their memories, but also to practice writing, to develop a disciplined writing habit, and to alleviate writer's block by having an alternate place to write if the current project is at a standstill (Bender 1997, Johnson 1997). Writer Phillip Lopate states that a journal "is to the writer what finger exercises are to the pianist (Bender 1997, 193)." Writer David Mas Masumoto believes "I increase my odds at successful writing by making myself available (Bender 1997, 208)." Elizabeth stated in her interview:

One of the common things that came up for me when I was writing in high school, whether it was a formal paper or fiction or reading journals that were common assignments, the number one theme, the most common comment on almost any paper, unless they just got tired of writing it on my papers, was 'Strong personal voice.' And that developed from writing in my journal. Duh! Of course I would! I know who I am...because I do this on a regular basis. And the people who write in journals aren't as scared to write papers or things like that.

Writing related uses for the journal might explain Frank's reason for keeping her diary.

The Need for Continuity, Mediation, and Communication

Writer and diarist Elizabeth Forsythe Hailey suggests another reason that Frank might have kept a journal, that Frank's diary "took the place of a life that was no longer possible in a society gone mad (Hailey 1986, 32)." Frank experienced an extreme form of what many diarists (and other individuals) face at some point in their lives: life changes that require major shifts in an individual's knowledge base or World 2 as they try to adjust to new roles, new places, new rules, and new possibilities. Diarist Phyllis Theroux observes:

While married, I made sporadic entries into various spiral notebooks, some of which are still extant. But the year I was divorced, I started keeping closer track of myself, for the same reason a ship's captain keeps a log: to fix my position, chart a course, and, in times of particularly bad weather, maintain my bearings (Theroux 1994, 28).

Margo Culley, editor of *A Day at a Time: The Diary Literature of American Women from 1764 to the Present*, states in her introduction:

Marriage, travel, and widowhood are all occasions creating a sense of a discontinuity of self -- I was that, now I am this; I was there, now I am here. Keeping a life record can be an attempt to preserve continuity seemingly broken or lost (Culley 1985, 8).

This is consistent with the findings of several interviews. Both Alexandra and Elizabeth reporting writing more when approaching upcoming marriages. Jaclyn stated that she wrote much more intensely when recently spending time abroad. In addition, Elizabeth noted that her eighteen year-old sister, a freshman at a college thousands of miles from her home, has begun keeping a journal with much greater intensity:

She's very confused and she's away from her family for the first time. We're a very conversive family and we share a lot of feelings and thoughts. She's been away from that and has had to get intimate with something else. The journal has been that source of intimacy for her.

In general, most diarists tend to write more when they have problems to resolve and less when their lives are in a calm state (Cooper and Dunlap 1989).

Historian Gayle R. Davis observes that diaries for women on the American frontier served as "mediating devices as well as repositories of factual information (Davis 1987, 6)." Davis lists five functions of these diaries as devices for mediation: between past and present, between the diarist's "self-perception as a Victorian lady and her feared loss of that identity in the wild," between feelings of fear and estrangement from feelings for the sake of bravery, between isolation and communication, and between being forgotten and being somehow remembered (Ibid., 7). The diarists could use writing as a way to establish a comfortingly predictable routine. Davis states, "By ritually enumerating the visitors, the quilts, the changes in the weather, even the deaths, significance and pattern were established. Experience was made tangible, finite, and controllable instead of remaining frighteningly unpredictable (Ibid., 12)." The diaries could also voice emotions and concerns that did not have to reflect gentility or courage, and to address grief for the old life while becoming acclimated to the new one. It should be remembered, however, that although journals are used more intensely by diarists when facing life changes, the diary is often used even in calmer times to establish and sort through self-knowledge and in "construction of selfhood" (Swindells 1996).

Of Davis' five detected mediations, the diary as a negotiator between isolation and communication may have been one of Frank's greatest motivations for keeping her diary. In the absence of regular contact with a variety of individuals due to the fact that her family was forced into seclusion, Frank may have turned to her diary as she might have otherwise turned to a friend. Friends, colleagues, and peers often serve the purpose of being a sounding board, of listening to the ideas we are forming with the information we are receiving, processing, applying to our knowledge base as a confirmation of the worth of those ideas. This indeed seems possible when we remember that Frank gave her diary a name, "Kitty," and often wrote as though directly addressing another individual. "Hearing" her own "voice" in the diary may have helped Frank to mediate between isolation and communication, but at the same time it may have helped her to articulate information needs and possible resolutions. Concerning diarists on the frontier, Davis notes, "For some women, diary-keeping addressed the often desperate loneliness and provided a kind of empathetic audience for the author's private thoughts and feelings. The journal entries served as a type of meditative inner dialogue to replace longed-for conversation (Ibid., 9)." Alexandra stated in her interview that she began keeping a journal with much greater intensity in the middle of high school, when approaching adulthood:

I don't know what really inspired me, but looking back on it I think I just needed an outlet. Somewhere where I could talk to someone that wasn't answering back or get all these things out of my head. There were lots of things going on that I really couldn't talk to other people about.

Penelope stated that when she writes she is "envisioning some future reader, my ideal reader who would completely sympathize without judging and understand everything."

In her 1997 article for the *Communication Review*, Rebecca Steinitz firmly argues for the diary as a means of communicating information despite the fact that in the last century diaries are often considered secretive documents. The idea of the diary as having an audience, discussed earlier as an important element of the diary as a product, returns as an element to be addressed when considering journals as means to process information. A potential audience for a diary can provide a sounding board and surrogate listener for diarists processing information. The former points to a use of the diary in encouraging articulation, an important step in the anomaly cycle or spiral. The latter, the diary as listener, provides a motivation for articulation. In an ultimate sense, the idea of a listening audience is about posterity. Of the frontier diarists, Davis states, "The journals mediated for the authors between feeling insignificant and feeling important, and ultimately, between being forgotten and being somehow remembered." Nancy Nelson Spivey, a researcher in the field of Education who specializes in studies of constructivism and sense-making, notes:

Another important part of being human is the desire, as individuals and as societies, to communicate our meanings, to share them with others. In order to share meanings, we create texts, both oral and written, following established customs and conventions. We cannot put meanings in the texts, but we can use marks, sounds, gestures, expressions, and other kinds of signs and symbols to get those other people to construct their own meanings, which we hope will have some similarity to ours (Spivey 1997, 1).

As was addressed earlier, diarists Alexandra, Elizabeth, and Jaclyn expressed strong desires for their words to outlive them. This idea is a captivating one for many. In 1989, a newspaper reported the discovery of the diary of Sandra Valentine, a thirty one year-old lawyer who quit her job and traveled the world until she was reported missing in Sri Lanka. Valentine was never seen again, but a year after her disappearance her diary, a rich log of her travel experiences and collected bits of information, was found (Fineman 1989). Three years later, a newspaper reported that a couple stranded in their car during a snowstorm died after eighteen days. A diary of their experience, which included reflections on their lives, was found with them (Johnson 1991). In 1994, a diary was brought up from the debris field of the wreck of the ocean liner *Titanic*. After 82 years in frigid salt water two and half miles deep where the pressure is 6,000 pounds per square inch, the diary was rescued, preserved, and found readable (Beaumont 1994). Diaries discovered after the deaths of their writers are considered newsworthy and even inspire awe. A diary that survives beyond the diarist doesn't grant immortality in the real sense of the word, yet part of the individual's knowledge base is preserved to inform later generations. That the information constructed by the individual doesn't get lost is a function of the diary as a product, yet it can be a strong motivation in the processing of information as well. While some diarists don't want their writing to ever be read by others, for other diarists it may be the ultimate articulation of their knowledge base and a highly satisfying legacy that helps give life meaning. Culley's preface to *A Day at a Time* stresses the importance

of "the urge to give shape and meaning to life with words, and to endow this meaning-making with a permanence that transcends time (Culley 1985, xi)."

On one of the unnumbered front leaves of Mallon's book on diaries, a poetic passage from William Soutar's August 13, 1943 diary entry is included:

Why do we wish to be remembered, even when none remain who looked upon our face? Surely, though it must retain an element of self-consideration, it is a last acknowledgement that we need to be loved; and, having gone from all touch, we trust that memory may, as it were, keep our unseen presence within the borders of day (Mallon 1995).

Anne Frank's diary, perhaps more than any other, has kept the diarist somehow "within the borders of day." It is ironic that Frank did get her wish to become a famous writer even though she never reached adulthood or knew that her writing was preserved. After being released from a concentration camp, Otto Frank, the only survivor of the Frank's family, was given his daughter's diary. It had been found by a family friend following the raid that captured the Franks, ignored as worthless by those who ransacked the house. This, too, is ironic. The manuscript of one of the most popular documents of the twentieth century was found tossed aside on the floor. This, too, is an element in the diarist's need for audience or posterity, in their motivation to write at all: belief in the value of their own knowledge base, in their words as conduits of meaningful information. Gloria Vanderbilt, speaking of the diary she kept as a teenager, states:

Sometimes the one page allotted for the day was not enough and the words spilled over onto the next day's page, bursting forth out of a desperate need for someone to talk to, a *you* who understood totally, unconditionally, but most of all a *you* who agreed with me. The diary made me feel that I was a person who had value (Vanderbilt 1996, 77).

Culley notes, "keeping a diary, one could argue, always begins with a sense of self-worth, a conviction that one's individual experience is somehow *remarkable* (Culley 1985, 8)." She adds, "the essence of the impulse to keep a diary is captured in 'I write, therefore I am.' And will be (Ibid)."

What unfolds is the realization that a subjective journal is about deeply personal life experience and self-knowledge. Explored further, it is often about honoring that self-knowledge and passing it along. While on the surface this might seem outside the realm of Information Science, but it is very much about an individual's knowledge base, about what they choose to study or accomplish and how they set about exploring or attaining these things. It is about what anomalies they are able to investigate and resolve, what connections they make out of various pieces of information. The information articulated in highly subjective journal entries still retain the power to inform, are still information even if without verification and a wide number of recipients.

A Safe Arena to Explore and Process Information

Frank herself suggests another reason she may have kept her diary. At the age of fourteen she wrote, "I can shake off everything if I write. My sorrows

disappear, my courage is reborn (Schiwy 1996, 124)." Aside from merely testing ideas, the journal had become a safe refuge to actively sort through new information and problems, sifting through the "inner noise" of emotion and hopefully integrating the information and resolving the problems (Cooper and Dunlap 1989, 13). One diarist, quoted by Cooper and Dunlap, states of her journal:

It permits me, it forces me to be introspective and to deal with thoughts and feelings that I have inside me that I otherwise probably would not deal with. And I find that to be very therapeutic, a very freeing kind of experience...sometimes if you get to the bottom, get to the end, you know you wish it were different, you know it can't be different, and so you accept it and go on. And sometimes you do come upon other ways of thinking about or dealing with an issue and that's OK too (1989, 12).

In the simplest form, journals help with the processing of information by storing it. Writing information down helps the diarist retain autobiographical memories first in that writing helps to encode the information so that it is more firmly retained but also by creating a written document for retrieval (Brewer 1986, Woolfolk 1995). David indicated in his interview that there was a sense of relief knowing "that it's written down and that I don't have to carry it around in my head." By writing the information down in his notebook, it could serve as an addition to his memory, which relieved David from having to spend time or energy on actively maintaining this information. This is also possible with a subjective journal entry. Elizabeth noted that she often feels a sense of relief after writing:

I think that's one reason I write daily because I get things out to help me be more functional. I can get out the fears or the misconceptions or the anger that I have with someone and then once it's there, it's just been downloaded. It doesn't have to be in my brain anymore. It's been recorded and I admitted it was there.

Relief from the responsibility of remembering, however, is not the only type of catharsis or release afforded to diarists working through information problems. As Elizabeth alluded to when she stated "I admitted it was there," catharsis can also be brought by attention placed on issues or anomalies and by clarity brought by processing information, resolving the anomaly, and constructing meaning about the issue or new information. It is quite possible to give only part attention to problems or anomalies so that anxiety exists but resolution is not reached.

As was addressed in the previous chapter, individuals don't passively receive knowledge. Instead, they construct knowledge by making sense of information and fitting it together with what they already know. Education researcher Nancy Nelson Spivey, author of *The Constructivist Metaphor:*

Reading, Writing, and the Making of Meaning, states:

We humans are builders, shapers, and designers, creating our artifacts from containers to cathedrals to computers to be used, replaced, and sometimes left behind to be studied by others. We build these tangible, visible products by selecting materials, putting components together, and giving form to wholes that are greater than their parts. In addition to creating things, we also create mental products, meanings, which we call understandings, interpretations, responses, intentions, plans, memories, and so on. We construct these meanings in relation to various aspects of our lives when seeing patterns, making connections and comparisons, inferring sequence and cause. It is this constructiveness, this characteristic building of meanings as well as artifacts, that is such an essential part of being human (Spivey 1997, 1).

Spivey's work determines that the theory of constructivism has existed throughout the centuries in various forms and within various viewpoints, becoming identifiable as a theoretical orientation in the early twentieth century. This theory rests on an emphasis of the active and generative nature of communication which indicates a synthesis process when an individual reaches towards understanding and expression. Another important feature of constructivism, which relates to the earlier discussion of relevance in information retrieval, is that its framework allows for varying meanings for the same text or information due to the differences in each individual's perspective, purpose, context, and level of prior experience.

Carol Kuhlthau (1988, 1991, 1993), a researcher in Communications and Information Science, like Dervin (1977, 1981, 1983, 1986) and others, has brought this philosophical and educational theory into Information Science. In the information search process, which Kuhlthau defines as "the user's constructive activity of finding meaning from information in order to extend his or her state of knowledge on a particular problem or topic," involves three realms of activity (Kuhlthau 1991, 361)." The first realm is physical, "actual actions taken," the second is affective, "feelings experienced," and the third realm is cognitive, "thoughts concerning both process and content (Ibid., 362)." She states that "A person moves from the initial state of information need to the goal state of resolution by a series of choices made through a complex interplay between these three realms (Ibid)."

That action and thought are involved in searching for information and reaching understanding is usually taken for granted. What is perhaps either new or often ignored, however, is the understanding that emotion also plays a part. Kuhlthau even states, "Uncertainty and anxiety are an integral part of the process, particularly in the beginning stages (Kuhlthau 1991, 361)." To this, she later adds that individuals experiencing new information also experience a feeling of disruption and even threat:

New information is assimilated in a series of phases beginning with confusion which increases as inconsistencies and incompatibilities are confronted within the information itself and between it and the constructs presently held. Confusion mounts, frequently causing doubt in the validity of the new information (Ibid., 362).

Kuhlthau notes that in some cases, the discomfort of the information construction process may be enough to cause the new information to be discarded and the construction abandoned. If the information seeker persists, the feelings of confusion and discomfort will most likely continue until a hypothesis is formed that has the potential to either integrate old and new information or to firmly establish the validity of the new.

Psychologist and researcher James W. Pennebaker has explored the relationship between disclosure and illness, focusing on the cathartic benefits of journals used to vent and confess, and has discovered findings similar to Kuhlthau's (King and Holden 1998, Pennebaker 1991). He notes that trauma and stress have adverse affects on mental and physical health, but that undisclosed trauma and unarticulated stress doubles the risk of illness (King

and Holden 1998, 359). Pennebaker's research indicates that disclosure, even to a journal that may be without an eventual audience, improves mental and physical health. Integration of feelings and event description seems to be the key, especially when emotionally-charged language is used. Pennebaker states:

I think we all have a need to understand our world. It is the thing that underlies reality more than anything else. It is not really confession we are dealing with; it is our need to understand, and to be a coherent person. By coherent, I mean that you act, think, and feel in a coherent manner. Stress results from thinking one way and acting another. In humans, there seems to be a need for unified self. I believe that this need for coherence or cohesiveness touches more than clinical or counseling situations; it involves psychology, the immune system, brain wave activity, brain structure, and cognitive dynamics. It is related to social dynamics, social psychology, developmental psychology, and personality (King and Holden 1998, 361).

Referring to scientific studies of the benefits of writing about traumatic events in a journal, Pennebaker observes a frequent phenomenon; initially diary writers may feel worse rather than better. As the writer perceives anomalies and begins to make sense of them, stress increases. Over time, however, clarity begins to be achieved and at least some feeling of release usually prevails:

In processing trauma, people move from a position of low understanding toward higher understanding and insight. Over 3, 4, or 5 days of writing, we have found that those who showed the clearest benefit across all of the studies are those who, at the beginning of their writing, did not explain much but were emotional and somewhat disorganized. By the end of the writing they had integrated their thoughts and feelings, and they had constructed a story about their situation. Our research suggests that both the emotional and the cognitive components of the process are necessary; healing will not occur with only one or the other (Ibid).

Jaclyn was not the only diarist interviewed who expressed a sense of relief or release stemming from journal writing. David said that writing short stories, which appear in some of his notebook volumes, was his way of "getting ideas out, emotions." Alexandra stated:

Yeah, there are times when I have been angry or really distraught or something like that, and, actually, fairly recently I was really feeling very depressed and angry, out of sorts. I started writing in my journal. Then I started really scrawling because I was upset. By the time I wrote through the passage and got everything out, I was feeling a hundred percent better. It really amazed me. I was really thinking, "There's something to this, to this journal."

Elizabeth echoed this somewhat, stating:

I might be unique in this, but most of my friends think of me as a pretty calm and even-tempered person. I don't scream or yell and do a lot of things like that, to get out that energy or that feeling. A lot of times it's a few paragraphs in my journal and it's over. It's not that I'm hiding anything or repressing, it's just that it's over then. Maybe I just work through it easier, I don't know, but the journal does help, either way.

Elizabeth also stated:

A lot of times I'll write during the day. The entries that come during the day at different times will be because of different events around my mind and I just...there isn't somebody around to talk to or I'm not ready to talk about what I'm feeling with anyone else yet and I'm using the journal to help sort out those feelings and thoughts, to get them organized in my brain and understand what I'm actually feeling.

Nursing instructor Linda J. Kobert wrote an article for the *Journal of Nursing Education* entitled "In Our Own Voice: Journaling as a Teaching/Learning Technique for Nurses (Kobert 1995)." In this article she addresses the idea that the essence of nursing is caring and that "caring can

only be found in a journey to the heart (Ibid., 140)." The affective aspects of caring, however, have to be carefully balanced with the idea of nurses as "professionals who can think critically and broadly, recognize and value the contextual nature of patient care situations (Ibid)." She states:

Journaling is a way of bringing together these diverse, illusive bits of information and experience, and can be used in directing students' understanding. In writing about the events of the day, we impose form on our often chaotic experiences and bring light to connections and meaning that would otherwise remain hidden (Ibid., 140).

Kobert also states that writing in a diary can make ideas clearer, that critical thinking skills are improved, and that diary entries "serve as physical evidence to students of their own evolution of thought (Ibid)." A reduction of confusion or chaos is brought by "imposing form" and anomaly resolution results from processing connections that have been "brought to light." The results of using a journal for nursing students, as noted by Kobert, is an improvement in what she calls "affective skills" which includes the ability to "reconcile discrepancies" in the messages nursing students receive from various sources as well as an improved ability to empathize with others. She adds, "Writing about what is happening and how they feel about it gives students the opportunity to release or share the stress they feel in the process of becoming (Ibid., 141)."

Another good example of the diary used as a tool not only to record, but to help provide a safe place to process information is the case of Charles Darwin. Vera John-Steiner's work *Notebooks of the Mind: Explorations in*

Thinking explores the methods and techniques of over fifty creative thinkers using interviews, diaries, letters, and autobiographies. She notes that creativity involves a "high degree of anxiety" and that "The creation of art and the construction of new knowledge requires artists and scientists to take risks (John-Steiner 1997, 63, 65)." She also notes that the development of scientific talent involves "the role of wonder, an interest in observing nature, a playful and exploratory approach to ideas, a willingness to tolerate long hours of solitude, and the courage to make mistakes (Ibid., 180)." Scientist Charles Darwin, author of the paradigm-shifting work *On the Origin of Species*, was a dedicated diarist. Ponsonby notes:

Darwin's Journal of Researches during the voyage of the *Beagle* is another instance of a record of scientific research in diary form. But it is not dry technical treatise. By writing quite naturally without omitting the enthusiasms of a young man filled with wonder, devoured by curiosity and absorbed in the work of investigation, he produced a book which brought within the range of the layman the researches of a scientific expert, and thus what might have been a dry and difficult dissertation becomes coloured [*sic*] with the spirit of adventure and invested with the charm of personality. The Journal covers almost five years, 1831 to 1836, and many quotations might be given to show that not only could he write and describe, but that he combined the aesthetic sensibilities of an artist with the curiosity and analytical concentration of a man of science (Ponsonby 1923, 27-28).

Mallon writes of Darwin's diary that "The theory of natural selection doesn't come to him with eureka suddenness; it only begins to evolve as a slow geologic rumble over the course of the nearly five years that the *Beagle* is at sea. And it is in the journals that one hears the tremors (Mallon 1995, 159)." Darwin's diary records his observations but also helps him sort out those

observations. The journal was a way of negotiating the discovery of what was an anomaly of proportions large enough to shake the foundations of science. Darwin's observations were objective and scientific, but it didn't keep him from feeling that coming to grips with his ideas and articulating them to others was, as he stated in a letter to a friend, "like confessing murder (John-Steiner 1997, 66)." The journal was his preferred tool in this process.

The journal is a place where articulation can be free from external censure long enough for the diarist to explore whatever topic is of interest, a private arena "in which we can safely be savage, opinionated, perverse, derivative and brilliant (Vanderbilt 1990, 17)." Freedom from censure may come in the form of freedom from criticism of content or of writing style and form. Susan L. Taylor, diarist and Editor-in-Chief of *Essence* magazine, states:

The ritual of keeping a journal isn't about spelling, grammar, or syntax; it's about liberation. Writing from our hearts is a way of getting behind labels and credentials we wear and unearthing the limiting ideas and beliefs we've internalized as our truths over time (Taylor 1995, 59).

Similarly, Schiwy notes:

Frequently, journal writing has no explicit goal save that of deepened self-understanding; yet, paradoxically, it may yield many significant benefits. It can encourage self awareness and exploration of one's private and public selves, thereby expanding one's sense of identity; allow for cathartic expression without fear of censorship or recrimination; provide a safe testing ground for questions and half-formed thoughts and insights; stimulate creativity and the flow of ideas by removing the fear of premature critical judgement; and build confidence through the gradual emergence and evolution of the diarist's written voice (Schiwy 1995, 235).

Sometimes the diary is a place to shamelessly and confidently explore the diarist's self-interest (Brophy 1995). In her often humorous yet straightforward essay on notebooks, writer Joan Didion addresses this issue:

It is a difficult point to admit. We are brought up in the ethic that others, any others, all others, are by definition more interesting than ourselves; taught to be diffident, just this side of self-effacing...Only the very young and the very old may recount their dreams at breakfast, dwell upon self, interrupt with memories of beach picnics and favorite Liberty lawn dresses and the rainbow trout in a creek near Colorado Springs. The rest of us are expected, rightly, to affect absorption in other people's favorite dresses, other people's trout. And we do. But our notebooks give us away, for however dutifully we record what we see around us, the common denominator of all we see is always, transparently, shamelessly, the implacable 'I' (Didion 1966, 136).

As writer and diarist David Mas Masumoto puts it, "No one will ever write 'Who cares?' over my words. I care and that's all that matters (Bender 1997, 207)."

Receptivity: Narrowing the View, Broadening the View

As was just discussed, the diary can be a workspace for an individual needing a way of exploring information that is free from outside censure. To continue with the metaphor of the workspace, the diary can also function like a work table, a platform where things may be isolated for closer observation or where elements of a problem may be laid out like so many cards that need to be viewed all at once, in context and with perspective, for sifting, selecting, organizing, or judging. Joanne E. Cooper and Diane M. Dunlap, whose

research targets journal use by administrators, note that the journal writing process can help users improve their powers of observation as well as "sort out issues and obstacles" (Cooper and Dunlap 1989, 9). They determine that the first step is "naming and framing" problems whether the problems are personal or professional in nature. The second step is to brainstorm or generate possible solutions and evaluate and analyze them through the writing process. They state:

Perhaps the most powerful factor in journal writing is its ability to make the problem solving process concrete, real, able to be discerned. If the diarist is able to capture and articulate possible solutions to problems on paper, they can be contemplated, manipulated, and understood in ways that are much more difficult if they just float around in the head (Ibid., 17).

A narrowing of attention may be a problem-solver's first step or it may be accomplished elsewhere in the process. Regardless of when this takes place, the diary is an excellent forum for this process. Spalding notes that a diary can be useful for addressing one element at a time, often in a slow, methodical way:

For just as to sketch a tree is to come to know it more intimately than by any other means, so to record experience as it passes is to extract from it more than it would otherwise yield. Not everyone can draw; not everyone has the diarist's temperament; but to the diarist born his diary takes the place of the artist's sketch-book. It is his particular way of intensifying perception (Spalding 1949, 39).

Although Spalding is addressing observation and perception as general skills, it should be remembered that these skills may be used not only to appreciate objects or events more fully, but they can also be applied to examining elements in a problem as a way of "naming" that problem. Although

it may seem contradictory, this focus can be used either to become more intimate with elements or to become more objective about these elements even while seeing them closely. To use extreme examples that may make the difference more clear, a closer look can either be like one attempting to memorize and enjoy a lover's face or as a scientist's somewhat detached observation skills used to observe the behavior of a new insect. The latter, objective focusing offers the step prior to broadening the view, understanding elements more completely before seeing how the element compares to the whole. Either way, the diary comes to function almost as a microscope, or at least as a log recording what was seen through a microscope. Rainer calls this effect "active receptivity," observing that it is a conscious choice to observe more carefully which may result either in heightened intimacy with feelings or in increased awareness of physical surroundings (Rainer 1978, 157, 280). As was mentioned in the section on visual and verbal elements within journals, naturalist and diarist Hannah Hinchman noted that many well-known naturalists used journals for increased receptivity:

It's interesting to examine the way people gather and store impressions over the course of a day. Even the most organized mind shifts incessantly from watching its surroundings to imagining a past or future event, making a judgment, checking the time, or noting hunger or thirst. Attention is fluid -- not given to strict step-by-step processes, often too restless to light with intensity on anything. What is it about a child's mind that allows it to register these impressions with clarity? It does not have a more sophisticated way of gathering information. Children use the same fluid, haphazard process that adults do. But receptivity diminishes over the years; adults learn to channelize their lives to get along in the adult world. Before that channelization begins, children can linger in self-forgetfulness. They stand and gaze or listen, and live in the gazing or listening. Nothing is held back; they are all eyes and ears...Part of the yearning many adults feel for

wilderness is a yearning for the kind of immersion they knew as children...How to invite that immersion -- how to arrive at it more readily? Henry David Thoreau was famous for his keen eye. A meadow, far from being an undifferentiated green, was to him an intricate profusion of specific plants and creatures whose forms, colors, and habits he knew well. Thoreau, John Muir, Gilbert White, and many other well-known naturalists were journal-keepers. The sketchbooks of wildlife artists such as Glen Loates and John Busby reveal the same kind of roving, observant eye. They all discovered a simple but highly effective tool for deepening perception: keeping records of what they observed -- written, drawn, or both (Hinchman 1986, 134).

Hinchman adds, "By making a record of what you have seen with a note, a phrase, a sketch, or even a lengthy, absorbed drawing or many pages of exploration, you make it your own. Next time you turn to look again, the world will be a degree richer and more distinct, and you will belong to it more completely (Ibid., 136)."

For some diarists, the experience of observing more carefully is a sensual or numinous one. Diarist Aletha Jane Lindstrom notes that her diary is helpful for being "alert" for "special things (Lindstrom 1989, 160)." "I am aware of the good smell of rain on a hot sidewalk, of a cluster of yellow butterflies along the road, of a bluebird's wistful song -- and for a moment I'm lifted out of my routine and the day takes on a kind of glory (Ibid)." For other diarists, like Charles Darwin, the purpose is more objective. While Spalding indicates that Darwin's diaries are enthusiastic, Darwin was actively collecting specific information for later use in scientific studies. Bowles (1994) and Gannett (1994) note that a journal, even if employed for subjective or deeply personal studies, is a way beholding a topic, even the self, at a slight distance much as the

scientist. This is the point where some diarists begin then to turn outward, broadening the observation so that it can be compared in a larger sense.

For some diarists, this may be connected with the idea of a potential audience. Jaclyn admitted that she is sometimes quite aware of how a journal entry will fit with other journal entries and how it might help present a whole, in this case a view of herself for posterity:

Sometimes when you really feel something so strongly, you write it and immediately as you write it, you think, "What am I saying?" Sometimes things that you think are so important...like maybe you've had a really bad day and if you're writing about that day. The second you're writing about it you're thinking, "How trivial." That kind of humbles you right there. I mean, do I really want to record this for all time? Yeah. It definitely makes you prioritize, I think. Because to put it in black and white makes it kind of final. It makes you realize, "I don't really want to be remembered for this."

Nursing instructor Linda J. Kobert also notes that while close observation is needed, the next step may be to compare that close view with the whole:

Students find that ideas become clearer when they must write them down. Through journaling, students can look objectively at their own role and activities as they relate to the context of the clinical practice setting. Students get a better sense of the whole as they view their own actions embedded in the complex interactions between self and others. The understanding that results from this holistic approach is a greater integration of knowledge with practice (Kobert 1995, 141).

Jaclyn indicated, as did Alexandra, Elizabeth, and Penelopé, that the passage of time also allows for perspective on ideas or observations that were first recorded in detail. Jaclyn stated:

When time passes and I look back, I can see how I felt at the time and how I feel now. It's the same event. You can definitely draw a lot of truths from that, from comparing the two things. And it definitely helps me narrow my view sometimes, to really understand. And it helps broaden it too. It does both. It's a beautiful thing!

The Power of Language and the Written Word

Diarist Daniel O'Connor wrote in his 1795 to 1802 diary, "I am now thinking on paper (Spalding 1949, 31)." As has been described, journals help individuals recognize anomalies or problems, sort out aspects of these anomalies or problems for clarification and perhaps resolution. But people do this every day within their minds. Does writing the process down accomplish anything that simply thinking does not?

When asked in the interview if writing in his notebook brought him catharsis, David indicated it usually did not, but that he will sometimes make a list of "things that are bothering me" and that "I've always been a firm believer in that kind of thing." He paused for a moment then laughed, adding, "Going back to when I was a kid, I used to write names on toilet paper of people that I didn't like and flush them down the toilet. That could be cathartic!" While highly amusing, the idea brings questions: Why was this cathartic? What power does the Word hold?

In the case of David's toilet paper words, the explanation may lie in psychologist Jean Piaget's idea of *semiotic function* (Woolfolk 1995, 35). When the name was written on the paper, language became the representative of a

person and the act of flushing the toilet represented an action or, perhaps more realistically, a feeling. Educational psychologists Jean Piaget (Woolfolk 1995, Bruner 1997), Lev Vygotsky (Vygotsky 1962, Bruner 1997, Woolfolk 1995, Yinger 1985), and Jerome Bruner (Bruner 1988, Bruner 1997, Smith 1977, Woolfolk 1995, Yinger 1985) have all investigated cognition, learning, and language. Building upon their work, as well as the work of others, other scholars have more specifically explored how writing facilitates learning. These researchers include James Britton (Britton 1978, Fulwiler 1980), Peter Elbow (Elbow 1973), Janet Emig (Emig 1977, Yinger 1985), Toby Fulwiler (Fulwiler 1980), Donald M. Murray (Murray 1978), and Robert A. Yinger (Yinger 1985). It not possible to examine the various theories and ideas brought forth by all these individuals, especially in detail, due to the scope of this thesis. However, their names are listed here for the reader's reference along with citations for key works or the works of other authors who have significantly addressed their ideas.

Bruner

Of particular importance to journal writing are the ideas of Bruner, who emphasizes the importance of active learning and inductive reasoning (Woolfolk 1995). Bruner also advocates the use of autobiography and narrative as ways of thinking and organizing experience (Bruner 1988). Language is seen as a way of "ordering experience and reflecting on it as well (Ibid)." He states:

I believe that the ways of telling and the ways of conceptualizing that go with them become so habitual that they finally become recipes for structuring experience itself, for laying down memory, for not only guiding the life narrative up to the present but directing it into the future. I have argued that a life as led is inseparable from a life as told -- or more bluntly, a life is not "how it was" but how it is interpreted and reinterpreted, told and retold (Ibid., 582).

Especially when dealing with self-knowledge, the journal can not only describe an individual's World 2, but it begins to structure it as well. For example, clarity and a positive view in a thoughtful and carefully constructed narrative can bring clarity and a positive attitude to the individual's World 2. Diarist and journal researcher Joanne E. Cooper notes ideas quite similar to Bruner's:

This present self can be discerned through a journey back in time, a journey that threads the past selves, like beads on a string, forming a necklace of existence, a present complex whole. Keeping a notebook is one way of keeping in touch with our past and present selves. A notebook, a diary, or a journal is a form of narrative as well as a form of research, a way to tell our own story, a way to learn who we have been, who we are, and who we are becoming. We literally become teachers and researchers in our own lives, empowering ourselves in the process (Cooper 1991, 98).

Cooper continues:

Writing a diary or journal is a powerful form of narrative in which we tell our own stories, allowing us to rethink our past, our present, and our future selves. It is a kind of journey, a journey from one moment to the next. We literally write our own stories, simultaneously incorporating our own future, as we reconstruct our past. Telling our stories through journal writing becomes a quest for understanding and integration, a bridging of the inner mindscape and the outer landscape. Madeleine Grumet suggests that "to tell a story is to impose form on experience [*Bitter Milk: Women and Teaching*. Amherst: University of Massachusetts Press, 1988. pg. 87]." Keeping a journal or diary, even if it is nothing more than a simple recording of events through periodic

entries, enables the writer to impose form on the often chaotic experience of life. Journals allow us to examine experiences, to gain a fresh perspective, and by that means begin to transform the experiences themselves...it is through telling our own stories that we learn who we are and what we need (Ibid., 98-99).

And finally, Cooper builds to the idea that by using the narrative, an organized and recorded document that can be referred back to as a history, meaning can be not only constructed, but reconstructed as needed to allow the diarist to build upon experience and grow:

As chroniclers of our own stories, we write to create ourselves, to give voice to our experiences, to learn who we are and who we have been. Our diaries become the stories of our journeys through life, stories that are both instructive and transforming in the telling and listening. These stories, these myriad voices, then serve to instruct and transform society, to add to the collective voice we call culture. Diarists, then, both as researchers and research subjects, begin to heal themselves and the split society has created between subject and object. Thus diaries, these small, insignificant objects filled with the simple words of our lives, can serve to make us whole (Ibid., 111).

For Bruner, reinforced by Cooper, language is seen as essential for thinking and states, "The shape or style of the mind is, in some measure, the outcome of internalizing the functions inherent in the language we use (Smith 1977, 129)." Words are "invitations to form concepts (Ibid)." Using language and words, meaning is constructed. The journal is an excellent place for the construction of meaning using language and words, particularly because it is involved with autobiography and narrative.

Britton

James Britton at the University of London examines the functions of writing. He suggests that writing taught in the schools is "narrowly conceived," with three function categories (Britton 1978, Fulwiler 1980). The first function category of writing is transactional, which is writing to get things done such as to inform, instruct, and persuade. The second category is poetic in which language becomes an art medium to create poetry and fiction. The final category is expressive, writing created for oneself that is basically thinking and speculating on paper, most often found in letters, first drafts, and diaries. Britton found that in the writing of high school seniors, 84% was transactional, less than 7% was poetic, and less than 4% was expressive. Britton's research led him to believe that these figures should change, that expressive writing, which is closest to thought and best adapted to exploration and discovery, can provide a matrix from which other forms of writing take shape. Expressive writing, which is characteristically not structured, "May be at any stage the kind of writing best adapted to exploration and discovery. It is the language that externalizes our first stages in tackling a problem or coming to grips with an experience (Fulwiler 1980, 15)." The journal can be a way for the individual to practice expressive writing and to gain benefits from its natural affinity to creativity.

Emig

Emig states, "Writing represents a unique mode of learning -- not merely valuable, not merely special, but unique (Emig 1977, 122)." She explores the differences between speech and written language, noting that listening, talking, reading, and writing are all languaging processes. Of particular interest to the idea of learning through writing, Emig notes that writing is slower than talking, must provide its own context, does not have an immediately available audience, and results in a graphic product. She observes, "Perhaps because there is a product involved, writing tends to be a more responsible and committed act than talking (Ibid., 124). She also observes, "Because writing is often our representation of the world made visible, embodying both process and product, writing is more readily a form and source of learning than talking (Ibid)." Emig's appreciation for the writing product as a document for learning applies directly to diaries as they have been explored in the thesis. Her research also shows how the slow, deliberate nature of writing can allow benefits that thinking and talking do not.

Elbow

In his book *Writing Without Teachers*, Peter Elbow refers to a writing process he calls "freewriting (Elbow 1973, 3)." Elbow urges:

If you are serious about wanting to improve your writing, the most useful thing you can do is keep a freewriting diary. Just ten minutes a day. Not a complete account of your day. You don't have to think hard or prepare or be in the mood: without stopping, just write whatever words come out -- whether or not you are thinking or in the mood (Ibid., 9).

Fulwiler notes, "This process illustrates immediately, for most writers, the close relationship between writing and thinking. The journal is a natural place to freewrite. Students can practice it on their own to get their mental gears moving toward a paper topic; teachers can assign free writing to brainstorm new research projects. Keeping these exercises in journals guarantees a written record of the ideas generated, which may prove useful during term study or, later, to document intellectual growth (Fulwiler 1980, 18)." In Elbow's view, the content of the articulation becomes more important than the manner of articulation. Elbow's ideas also help the writer to get past self-criticism due to the speed of the writing and also helps them to be free from external demands of proper grammar, spelling, and punctuation.

Fulwiler

Fulwiler is one of the strongest proponents for journal use in education. By requiring students to write down what they see in their journals, Fulwiler finds

that they look more closely and carefully, allowing them to begin to acquire the rudimentary techniques of scientific observation (Fulwiler 1980, 16). Journals not only stimulate the powers of observation, but they also help students to think critically, grow as an individual, develop visual thinking if encouraged to incorporate visual elements, and to be personally engaged in the learning process. Even in classes outside of the liberal arts and humanities, Fulwiler feels that "some free, imaginative speculation helps (Ibid.)." He uses journals in his own literature and composition classes, noting that they are valuable for processing information and bringing problems to resolution:

Sometimes, when a poem or story is particularly difficult, I will ask students to write about the line or passage which they do *not* understand...by next class, students who have taken this suggestion seriously will have written themselves toward understanding (Ibid., 17).

He further states that "Each journal entry is a deliberate exercise in expansion: 'How accurately can I describe or explain this idea? How far can I take it?'" and notes that "The journal demands the students expand their awareness of what is happening, personally and academically, to them (Ibid., 17)."

Yinger

Yinger states, "Writing encourages people to think in ways that clarify and modify their ideas; people learn from writing (Yinger 1985, 21)." He notes four major characteristics of writing that make it a unique way of learning. The first is that the writing process is multirepresentational and integrative. He

states, "As people shuttle back and forth between images, actions, and symbols, they enrich their knowledge, and in effect, they learn (Ibid., 22). To elaborate, he adds:

The act of writing compels the writer to express in symbols knowledge originally represented and stored in memory in a different form. This process of re-presenting knowledge can lead to greater understanding. The manipulation and transformation of knowledge can spur new learning as individuals perceive the same experiences in a different light (Ibid).

The second major characteristic of writing is that it incorporates self-provided feedback. "What has just been written is available immediately for rereading, evaluation, and revision (Ibid., 23)." Third, writing requires deliberate structuring of meaning. He states that learning "requires establishing connections and relationships; people learn as they relate new information to what they already know. The act of writing requires this same kind of connecting and organizing (Ibid)." The final characteristic of writing is that it is active and personal. "The cognitive view of the learner emphasizes that learning occurs chiefly when a person actively seeks to interpret and make sense of the world (Ibid)." Yinger declares:

Writing, because of its active and personal nature, its cognitive demands, and its feedback characteristics, makes possible unequaled forms of extended and involved thought. Writing allows both construction of meaning and investigation and enlargement of reality (Olson, 77). Journal writing, with its focus on personal thoughts, feelings, and reflections, puts writers in a position to learn important things about themselves (Ibid., 24-25).

He adds:

People are often unaware of how much they know about the world, a specific situation, or themselves until they take the time to think about this knowledge and make it explicit. This is especially true in situations where people have functioned for some time and to such an extent that much of their action has become automatic or routine. Journal writing, researchers have found, creates a situation encouraging reflectiveness and explicitness, often leading to a renewed awareness of a person's knowledge (Ibid).

Murray

One diarist in Cooper and Dunlap's study of journal writing and administrators noted:

I have no idea what I'm going to write. I sit down. I pick up the pen and I write something. I go, "Whoa! That was on my mind?" So it's almost a way for me of reading my mind, which sounds real odd, but it is fascinating sometimes to see what you write, when you sit down to write. So I know that immediate sense of, "Huh! That was important to me (1989, 13)."

This phenomenon is the specialty of Donald M. Murray who explores the idea of revision or rewriting in composition. While these writing processes may seem at first glance to be unrelated to journals, the idea that "rewriting" exists in diaries as entries repeated on the same topic or theme was introduced earlier in the thesis. Murray strongly adheres to the idea of writing and rewriting as an opportunity to learn. He quotes Elie Wiesel: "I write in order to understand as much as to be understood (Murray 1978, 87)." Murray describes quite accurately the attitudes many people take towards writing and how writing can be seen as a process:

In teaching, I often feel that the most significant step is made when a student enters into the writing process and experiences the discovery of meaning through writing. Yet this process of discovery has not been generally explored or understood for a number of reasons. First of all, it has not been experienced by nonwriters or admitted when it is experienced by writers of the less imaginative forms of writing. One professor of philosophy, after reading a text of mine, confessed he had been ashamed of the way he wrote, that he didn't know what to say or how to say it when he sat down to write. He had to write and write to find out what he had to say. He was embarrassed and didn't want his colleagues to know how dumb he was. When he read my book he found his activities were legitimate (Ibid).

He adds:

I do not agree with the educational segregation of functional and imaginative writing, creative and noncreative writing. I know the process of discovery takes place when I write fiction and nonfiction, poetry and memos. To produce letters, reports, novels, essays, reviews, poems, and academic papers that say something, you have to allow language to lead you to meaning. (Ibid., 88).

Murray's views of writing and rewriting as voyages of discovery adhere closely to the uses that diaries can perform.

Reaching back to our hypothetical history student, as this student researches her paper she may be confused and even overwhelmed as she tries to fit bits of information and prior knowledge into a new perspective of Amsterdam during World War II. She may not realize how much she knows, not perceive all the connections between bits of knowledge, until she begins to write.

CONCLUSIONS AND IMPLICATIONS FOR FURTHER WORK

Journals are personal documents. Although there are exceptions, they are created and used primarily by a single individual to address whatever needs or uses the diarist chooses. This thesis touches upon many, although certainly not all, possibilities for journals. It provides evidence of diaries used to process, organize, record, and access information dealing with both the deeply personal and the professional, an array from religious matters to sports training to naturalists studies to business needs to interpersonal relationships and beyond. Information in diaries also varies by physical form, recording technique, recording style, and overall structure. A diary can be a few lines of text written daily in a blank book or a box full of notes and images on random scraps of paper. A diary can be miniature essays written in the first person describing activities or it can be a collection of lists, freeform poems, drawings, diagrams, metaphorical explanations, and vivid descriptions.

Ultimately, these personal information documents can be seen as existing along two major interrelated continuums, each diary's position determined by the relative objective or subjective nature of the content and by the diarist's focus on product or process. Whether the position of the diary on the continuum is important or not depends on who is judging the diary and what purpose the diary is being asked to serve. Whoever the judge and whatever the purpose, a diary's position along the continuum may remain relatively stable

or it may evolve as the diarist's needs change from volume to volume or even from entry to entry. Far more important than knowing details about the average journal or the average diarist is the idea that the journal is ultimately flexible, that it has the potential to be a safe arena to explore any interest and process any information, and that it preserves knowledge and the process of constructing that knowledge for later use.

In this thesis, journals and diaries have been referred to both as information tools and information systems. Both "tool" and "system" are accurate terms. A diary is an information tool, but it is a tool that can be applied to solve many information problems both as a product and as a process. It is this flexibility that also allows the diary to be called an information system, a means of helping the diarist process, organize, record, and access information on a somewhat regular basis in forms, styles, and methods that vary with need. This personal information system is usually not complete in itself; the diarist may rely on additional personal documents such as a calendar, address book, photo album, or scrapbook as well as upon conversations with friends and family to help solve personal information needs. Nevertheless, because the journal can be applied to multiple information functions which are often interrelated, the journal can be thought of as an information system.

The foundation of the journal as a tool or information system is the idea of the personal knowledge base, Popper's World 2 (Brookes 1980, Popper 1972). An individual's perceived knowledge of World 1, all that can be known, is held in their own knowledge base (World 2). This must be the case before

any knowledge can be turned into an object, written text or an artifact that occupies World 3. The research of Brookes (1980), Belkin (1980), Dervin (1977, 1981, 1983, 1986), Farradane (1979), and Kuhlthau (1988, 1991, 1993) holds the implication that the relationships between Popper's three worlds are not static. When information is introduced or sought, an individual's knowledge base or World 2 usually changes. Either by accepting information at face value or by processing it through the anomaly cycle/spiral, an individual's World 2 is constructed and reconstructed. In turn, it is integral to this idea that the knowledge held by an individual, their personal World 2, is subjective in the absolute sense of the word (Dervin 1977, 1981, 1983, 1986). Knowledge cannot be completely separated from the knower.

In the first chapter of her book, *The Constructivist Metaphor: Reading, Writing, and the Making of Meaning*, Nancy Nelson Spivey quotes M. Polanyi: "Any attempt rigorously to eliminate our human perspective from our picture of the world must lead to absurdity (Spivey 1997, 4)." The idea that some degree of subjectivity in all information must be accepted has important implications for the concepts of information and the knowledge base. Moving away from an extremely positivist view might mean to cross to the other extreme, that all information is subjective and any piece of information is as good as any other. As was seen in the discussion of the quality of information, however, this is not a useful outlook concerning information either. Instead, there is a balanced and more useful middle ground, a way of approaching information that allows the information user or seeker to evaluate then use information from a variety of

sources. The result is an integration of objective and subjective, the personal and the professional, the scholarly and the intuitive.

Objectivity and Subjectivity: Separation and Integration

While conducting the research for this thesis, it was noticed that several of the most useful sources on journals cited the same work, one that is not specifically about journals (Cooper and Dunlap 1989, Cooper 1991, Gannet 1992, Kobert 1995, Schiwy 1996). This source, a book entitled *Women's Ways of Knowing: The Development of Self, Voice, and Mind*, was published in 1986 by several authors from the fields of Psychology and Education, Mary Field Belenky, Blythe McVicker Clinchy, Nancy Rule Goldberger, and Jill Mattuck Tarule. The authors state:

We became concerned about why women students speak so frequently of problems and gaps in their learning and so often doubt their intellectual competence. We had also become aware of the fact that, for many women, the "real" and valued lessons learned did not necessarily grow out of their academic work but in relationships with friends and teachers, life crises, and community involvements. Indeed we observed that women often feel alienated in academic settings and experience 'formal' education as peripheral or irrelevant to their central interests and development (Belenky et al. 1986, 4).

The researchers explored these problems using in-depth interviews with 135 women of various backgrounds and educational levels. What they perceived as a result of this research is that there are five ways of knowing for women. Each involves ways of handling knowledge and also "voice," an

individual's point of view including perception of connectedness to others and an ability to articulate knowledge confidently and effectively.

The first way of knowing is *silence*, a state in which women feel disconnected from knowledge and have no voice. Women feel they have no choice but to wordlessly obey authorities who are viewed as all-powerful as well as sometimes overpowering. "They do not envision authorities communicating their thoughts through words imbued with shared meanings (Ibid., 26)." Life is viewed in terms of polarities. "Everything is either big or little, good or bad, win or lose (Ibid., 30)."

The second way of knowing is *received knowing*. These women put high value on advice, with words being central to the knowing process. They are open to the ideas of others, but have little confidence in their own ideas or their ability to articulate what they know. "They assume that all authorities are infinitely capable of receiving and retaining 'the right answer' with impeccable precision (Ibid., 40)." These women can repeat what they know as learned from others, but experience difficulty creating original work.

The third way of knowing is *subjective knowing* in which the inner voice becomes important. "Truth now resides within the person and can negate answers that the outside world supplies (Ibid., 54)." As in many non-Western and non-technical societies, intuitive processes come to be held in high esteem. Experience often becomes a more valuable source of information than outside authority, which sometimes leads to a complete rejection of authority's influence. Multiplicity sets in where "truth is no longer conceived as absolute

and singular, but multiple and infinite” so that thinking is no longer polar (Ibid., 62). In an academic setting, a teacher’s idea may not be rejected in an absolute sense, but a student in at the subjective stage may frequently decide “That idea is right for them, but it isn’t right for me.”

The forth way of knowing is *procedural knowing*, in which “the voice of reason” can impose form on knowing or expressing knowledge. It comes to be understood that intuition may not be trustworthy and that rules or procedures exist to not only help gain objectivity, but also to provide a framework for their articulated knowledge so that it can be taken seriously by others. “She realizes that her teachers do not presume to judge her in terms of her opinions but only in terms of the procedures she uses to substantiate her opinions (Ibid., 92).” For example, an art student discovers that while she would not be taken seriously if she simply wrote “This is a bad painting” in an essay, she would be taken seriously if she addressed weaknesses in the painting’s composition or color theory, especially as those elements relate to existing traditions in art history. While procedural knowledge is highly useful, it often holds reason and objectivity in such high regard as to restrain insight. “Feelings and beliefs are rigorously excluded (Ibid., 109).” “The inner voice turns critical; it tells them their ideas may be stupid. Women at this position think before they speak; and, because their ideas must measure up to certain objective standards, they speak in measured tones. Often, they do not speak at all (Ibid., 94).” If an individual’s viewpoint cannot be verified, it may be rejected by that individual despite its personal importance or its ultimate usefulness. The art student may have

strong convictions and novel ideas concerning the painting, but she may not express or address these if she cannot find a way to formally verify or back up her ideas.

The fifth and final stage or way of knowing is *constructed knowing*. In the most basic sense, it is an integration between subjective and procedural knowing. The objective and rational are tempered or balanced with the intuitive and even the emotional, the absolute and impartial with the idea of the contextual and the individual. Proper procedure is important, especially during articulation, but authority and external truths need not prevail. Women at this stage “told of weaving together the strands of rational and emotive thought and of integrating objective and subjective knowing. Rather than extricating the self in the acquisition of knowledge, these women used themselves in rising to a new way of thinking (Ibid., 134).”

An earlier study by researcher William Perry, *Forms of Intellectual and Ethical Development in College Years*, was used by the authors of *Women's Ways of Knowing* to help design their study, but also as a basis for comparison (Belenky et al. 1986). Perry's study of Harvard undergraduates included some women, but used primarily men. While Belenky and her co-authors conducted more thorough interviews and placed their findings in the contexts of families and school, and while the two studies explored different populations, both came to relatively similar conclusions. Perry noted positions which he called *basic dualism*, *multiplicity*, *relativism subordinate*, and *relativism*. These are closely

related to *received, subjective, procedural, and constructed* ways of knowing. A passage from *Women's Ways of Knowing* sums up Perry's last position:

It is only with the shift into full relativism that the student completely comprehends that truth is relative, that the meaning of an event depends on the context in which that event occurs and on the framework that the knower uses to understand that event, and that relativism pervades all aspects of life, not just the academic world. Only then is the student able to understand that knowledge is constructed, not given; contextual, not absolute; mutable, not fixed. It is within relativism that Perry believes the affirmation of personal identity and commitment evolves (Ibid., 10).

Individuals viewing knowledge and information through relativism or a constructed way of knowing often face dilemmas. What does one do with intuitive elements that cannot be confirmed, with the personal that is relevant and useful to the information problem at hand? It is a most difficult quandary for some scholars to solve, but Gloria Bowles, a researcher who has explored the use of journals in academic discourse, notes that the personal moving into the world of academia is happening, at least to some extent:

The vexed question of the nature and expression of the personal, the emotional, is now entering scholarship, especially feminist scholarship; it is entering reluctantly, sometimes almost strangely. Autobiography has taken its place alongside fiction as a major subject, but much less has been written about journals. Some feminist scholars are now attempting forays into their own autobiographical, personal writing. Because we have been trained to be analytical, scholars are still a little embarrassed by the personal and awkward in expressing it; moreover, the fashionable coded language of contemporary academe has taken scholars even further from themselves. There is little institutional reward for such attempts; academics generally have a hard time admitting that emotion plays a role in what we choose to study and how we study it. Thus the personal is sometimes defined in narrow ways (Bowles 1994, 264-265).

While the personal and/or subjective may or may not be brought directly into scholarship, it can at least be addressed on the level of the individual.

Yinger noted that "journal writing provides a means for dialogue between the subjective and the objective, between personal and corporate meaning (Yinger 1985, 26)." Shiwy states:

The personal journal may serve as the intermediate space in which private and public, personal and political, individual and social, experiential and conceptual concerns meet and intersect (Shiwy 1995, 235).

In her interview, Elizabeth states concerning her journal:

It helps me to integrate, but it also helps me to separate. I've used it as a tool when I'm thinking through a paper. Let's face it, there are times when we're representing a viewpoint we don't always agree with, but it's the way the paper has to be written or it's what's being addressed. I go out and spurt out all the emotional reaction to it or work through all my problems with the issue in my journal. It's the pre-writing draft process for a formal paper that's going somewhere else. And then you pull out the objective and the dry to use elsewhere. You can get objective elsewhere. It helps to integrate, but it also helps to separate because it's all there at the beginning for me. It helps me sort out what's going to happen.

Scholars Herman Woodrow Hughes, Mary Kooy, and Lannie Kanevsky recently wrote an article about changes in education and the use of the journal much as Elizabeth uses hers, a way to address information both objective and subjective as well as from many sources. This article, entitled "Dialogic Reflection and Journaling," clearly links the journal process with constructivism, constructing meaning as was addressed by Dervin (1981) and constructed ways of knowing as was addressed by Belenky and her co-authors (1986). Hughes and his colleagues indicate that education at all levels is involved in a

paradigm shift away from a view of knowledge as an external entity existing independently of human thought and action, something about which one can be objective. Instead, they identify a shift towards a view of knowledge as internal and subjective. They quote educator H. G. Petrie from a 1990 work entitled *Reflecting on the Second Wave of Reform: Restructuring the Teaching Profession* [NY: Longman, 1990] and state, "This new paradigm considers 'knowledge not as somehow in the possession of the teacher, waiting to be transmitted to the student or to be used to treat the student's problem, but as mutually constructed by teacher and student in order to make sense of human experience' (Hughes et al. 1997, 187)." The authors use their article to "briefly introduce our view of the paradigm shift and offer a strategy to engage learners actively in constructing their own meanings in a powerful way that can be monitored by their instructor (Ibid)." This strategy is the journal.

Scholarly procedures and standards have developed to help insure that information is usable, that variables have been addressed and controlled where possible. This is as it should be. However, sometimes positivism takes such a hold that it is forgotten that all information is subjective in the ultimate sense and that human beings have no choice but to view information from their own eyes, from a knowledge base that consists of their own experiences, views, and level of expertise. Intuition, hunches, and as-yet-unverified ideas can be marginalized to the extent that they will not even be articulated, explored, or addressed. Ideas are abandoned or explored only mentally where it is difficult

to retain sufficient memory of the thought processes and information involved. Imaginative and original thinking and problem solving, otherwise known as creativity, cannot flourish within this mindset (Woolfolk 1995).

The journal, however, is an excellent place to nourish creativity and creative problem solving. Anomalies and connections can be addressed more easily when the restructuring of problems and divergent thinking is perfectly acceptable (Ibid). Solutions that are novel, nonconformist, and even surprising can be reached. Rich language and metaphor, expressive writing (Britton 1978) and emotionally charged words (King and Holden 1998) can be used. The writing process itself is slow enough that thoughts can be carefully processed and there is a record, a World 3 document, which can be returned to later when an information problem is re-addressed or after an incubation period (Emig 1977, Woolfolk 1995). Perhaps some of the content of the diary, writing addressing the personal, may find its way into academic writing (Bowles 1994). Perhaps it won't. But in the journal it can be expressed rather than pushed away, explored rather than left stagnant, remembered rather than allowed to fade.

Technology and Journals

In 1945, Vannevar Bush wrote an article entitled "As We May Think" that described a *memex* machine (Bush 1945). Although the term *hypertext* wasn't coined until later, the memex model presented an imaginary prototype very

much like a modern personal computer with Internet access allowing non-linear information searches. Decades after Bush's article, one can use a modern personal computer to search the Internet for information concerning almost any topic of interest and can follow hypertext along any particular path. One example might be a lawyer looking for information about copyright issues involving the IBM Corporation. Using a personal computer connected to online databases or the Internet, she might find a variety of information from lists of copyright laws to company reports to legal proceedings from related cases.

The sharing of computerized files and databases allows for greater power and flexibility in the use of information. Perhaps even greater power and flexibility for the individual user could be achieved by integration of existing information retrieval systems with password protected personal files belonging to that user. An individual could search not only for published information created by others (World 3), but could also search their own personal files as well. To return to our scenario, the same lawyer's computer would be able to provide searches for information in forms like those listed above, but it would also be able to search and provide links for personal calendar pages showing any and all meetings the lawyer had attended concerning copyrights or IBM. Notes from those specific meetings, perhaps downloaded into the main computer from a portable laptop, might also be retrieved. Other useful information might include a personal citation list of relevant articles the lawyer has already read or even a personal diary entry containing details from an unsuccessful business lunch with an IBM representative, an entry which

recorded possible strategies for dealing with IBM in the future. The lawyer, as a user of computer-based information retrieval, now has a powerful system that not only puts her in touch with the information of others, but also allows access to relevant personal information that otherwise might have been forgotten, devoid of detail, or difficult to retrieve.

In order for fantasy to become reality or, to put it in a more concrete manner, for idea to become software, information consumers and their present methods of personal information storage and retrieval must first be studied. How do human beings store and organize personal information both cognitively and in their external lives so that they can effectively retrieve it later? What behaviors and processes on the part of the information consumer help to make cognitive (mental retrieval) and/or physical connections (document retrieval) with ease and rapidity? Looking closer at journals is an excellent beginning to such studies.

Implications for Further Study

This study accomplished the goals of the research and the qualitative information gathered was quite helpful in this process. However, there are several opportunities for further research. It would be helpful to study not only accomplished or prolific diarists, but also diarists who are more sporadic to see how personal information systems evolve and develop over time. Also, it would be quite helpful to interview individuals concerning their total systems for

personal information retrieval, including calendars, personal databases, address books, scrapbooks, organizers, etc. Finally, it would be interesting and helpful to further study the objective/subjective continuum in journals, but also in personal information retrieval in general. It was not until the interviews were complete for this study and analysis was well underway that it was understood the impact that objectivity would have. During the analysis stage, it became clear that four of the diarists were highly subjective in their journal content while the other end of the continuum was represented primarily by one individual. While the purpose of this study was to show possibilities for journals rather than provide generalizations about diarists and was therefore successful, a study using a larger number of diarists and a population spread across the objectivity/subjectivity continuum would perhaps provide more information about personal information systems.

I see the effect of journal-keeping in reverse when I don't do it for a while, for whatever reason. I begin to feel a kind of malaise, an indigestion of the spirit; too many experiences have accumulated without being truly seen or felt. The journal has become a necessary extension of my thinking, feeling self. If nothing goes into it, I become slightly disconnected, unresponsive, less than alert. The solution for that is usually an entry of thousands of words that leaves my hand paralyzed and my spirit blissfully spent.

"If our lives are vessels, continually being filled, then each of us needs a way to empty them. That emptying can take dangerous and destructive or creative forms; an explosion of energy or an outpouring of love. The journal is a place to decant the stuff of life; reassuringly, none of it is wasted. It remains fresh, still tasting of its source. Transferring experience from the vat of life into the vessel of the journal is a distillation: it sieves, concentrates, and ferments. If after many seasons we develop some mastery of the process, the stuff can become as clear and fiery as brandy.

--Hannah Hinchman, *A Trail Through Leaves* (1997, 16)

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