From Generation to Generation:
Family stories, computers and genealogy

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Licenciado en Sistemas
Universidad CAECE
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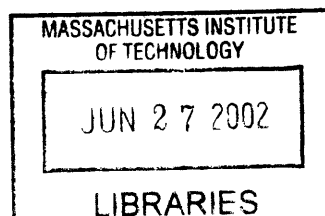Program in Media Arts and Sciences, February 2002

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Abstract

Telling stories about a family's common past solidifies its sense of community, and enriches member's sense of identity and belonging. In preindustrial times this information flowed orally thanks to continuous and prolonged cohabitation, but the dispersion of kinship in modern society has severed the ties between the generations. On-line communities can help restore these links by providing virtual spaces whose design specifically encourages storytelling.

In order to arrive at this design, this thesis (1) surveys the importance and characteristics of family storytelling, (2) discusses the procedures used by oral historians and folklorists for story elicitation, and (3) analyzes a number of existing systems in terms of the above theoretical background.

This thesis concludes with a series of guidelines for the design and implementation of communities for family storytelling. Different ways of indexing and accessing stories are discussed, and appropriate representations and interfaces that facilitate the storytelling process are presented.

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Family stories, computers and genealogy**

By Martin Hadis

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1 INTRODUCTION

1.1 Genealogy and Family History

Genealogy, the recording of lineages, has history as remote as the roots that it seeks to uncover. Emperors and kings of civilizations as distant and separate in space and time such as Japan, Sumer, India and medieval England used genealogy to validate their claims to the throne. The Greek, the Romans and the Egyptians traced their lineages back to the gods; just as Islamic rulers have traced (and continue to trace) their descent from the Prophet Mohammed.

In early days lineages were transmitted orally, and each generation passed this information to the next. The Japanese *kataribe*; the celtic *shanachy* and the Germanic *scop* all shared a common task: to record, recite and preserve the ancestry of chieftains and heads of state. These lineages, recited aloud, took the form of narratives which provided the name of ancestors as well as lively descriptions of the feats, exploits and achievements in which they had participated The survival and transmission of these oral compositions was ensured by the continued existence of these specialized clans who learned them by heart, carried them in their memory and preserved them for posterity. Later on, with the arrival of writing, the lineages of kings started to be recorded in paper, and memory was gradually phased out as the main mode of transmission. With the growth of trade, genealogy gradually became an important tool for proving ownership and inheritance of lands and goods. As time passed, this practical use of genealogy continued to increase, to the extent that it largely overshadowed all other possible purposes. Except for nobility and the incurably nostalgic, most people saw little use in recording the history of their ancestors.

The last few decades have seen resurgence, not only of genealogy, but of its allied discipline, family history. Whereas genealogy provides the essential scaffolding, family history fleshes out these facts into a narrative:

> *Family history is more than just birth, marriage, and death dates, it is the story of individuals' interaction with the community and other individuals [Central New York Library Resources Council 1997].*

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Computers have kept pace with this resurgence. Genealogy websites number in the thousands; search services that allow users to find long lost relatives, on-line indexes are available that provide census data for the last two centuries and beyond, and personal genealogy software programs allow users to publish their family trees on-line. The number of products that allow users to classify and index the information that they obtain from their own families ranges in the dozens if not hundreds.

This increase in genealogical interest has been taking place for more than a decade, and at this stage one can safely state that computer applications for genealogy have reached a plateau of maturity and usefulness. In a fashion similar to word processors, developers of genealogical software keep adding new functionalities to their products in order to differentiate them from competitors in the market. But as far as design concepts are concerned, the problem of helping genealogists carry out their research in standard fashion has long been solved. As far as standard genealogy applications are concerned, apart from cosmetic modifications in the display and printing out of genealogical information, there is little new under the sun.

This, however, only concerns genealogy, that is the kinship relationships that go to form the lineages and pedigrees of families, and the associated data that support their organization, display and maintenance. In the case of family history, the situation is reversed. Software products are few and far between. *Memories*, a system that supports autobiographical writing reviewed in Chapter 6, is a step in the right direction, but it suffers from serious limitations: it is not collaborative, and it completely lacks any kind of on-line support. Ingeborg Endter's thesis project, reviewed in the same chapter, is a true online community, and an excellent first attempt at creating an on-line community for reminiscing. But whereas it can be successfully used by a family, it is not directly targeted towards family history. To this day, no software system exists that truly supports an on-line community whose shared purpose is the elicitation, collection, indexing and visualization of *stories* that are specifically produced by a family, that is, by a group whose members are all related.

1.2 Goals of this thesis

This thesis has three main goals:

Providing a theoretical background

The first goal of this thesis is to provide the necessary theoretical framework to understand:

- The importance and characteristics of family storytelling, its benefits and its relation to community building

- The procedures and techniques most used by on-field professionals for story elicitation

- The importance of parsing and annotating stories with the purpose of navigation, and the relevance of using certain features of stories instead of others as keys for indexing and navigating them.

Analyzing and exploring existing systems

The second goal of this thesis is to analyze a number of existing systems in terms of the above theoretical background and of each other in order to understand how an on-line community for family history could be built.

Providing design and implementation guidelines

The third and final goal of this thesis is to provide a series of guidelines and design specifications for creating an on-line community dedicated to genealogy and family history.

1.3 Key contributions of this thesis

The following items summarize the main findings of this thesis:

Family storytelling is beneficial in itself, both as an institution and as an activity.

Telling stories about a shared past within a group as bestows the benefits of continuity, identity, guidance and community upon both the teller and audience.

The natural flow of family stories from one generation to the next that occurred in preindustrial times has been interrupted by modern population patterns.

Up to relatively recent times, the extended family was the social unit. Prolonged co-habitation in geographical proximity naturally led to maintaining links of community and identity among extended kin. These links have been severely undermined by the dispersion of kin resulting from new patterns in population distribution.

Computer technology can help restore these links by providing family members a virtual place to meet.

Virtual spaces on the internet can help restore these severed links by allowing family members to resume contact and exchange stories on-line.

Effective induced contexts must be provided to facilitate storytelling among family members.

It is uncommon for people to break into personal storytelling without sufficient prompting and motivation. Experience from oral historians and folklorists shows that the interview is a necessary and valuable tool for eliciting stories from informants. Interview techniques are thus highly relevant to the design of family storytelling communities.

Existing computer systems for genealogy and family/community history offer partial but valuable solutions.

This thesis reviews a number of existing systems whose designs are relevant to the design of an on-line community for family storytelling. The solutions they offer only partially match the implementation goal

of this thesis, but useful ideas can be obtained by analyzing them and improving on their basic design

People, places and time are the main indexes to be used for organizing and navigating materials contributed by community members. Appropriate representation and interfaces must be used to store and access materials through each of these keys.

These three keys are cited by both oral historians and researchers of autobiographical memory as the main indexes used to store and access memories and stories. The effectiveness and power of community-building tools can be increased through appropriate representation and accessibility of this information.

Creating an on-line community for family history and genealogy entails a revision of the genealogical enterprise from a systems analysis perspective.

Having an on-line community for family members to engage in storytelling about their shared past not only bestows the above mentioned benefits on participants. It also drastically and advantageously alters the genealogical inquiry from a systems analysis perspective. The standard model for genealogical inquiry implies that a single researcher gathers all the evidence and processes it to provide participants with a single final document. With an on-line community for family storytelling all members of a family can contribute in continuous and open fashion to build a composite mosaic of their common past.

1.4 Copyright notice

2 THE BENEFITS OF FAMILY STORIES

Some authors attribute the recent surge in interest in one's ancestors to the phenomenal success of Alex Haley's best seller *Roots* [Haley 1976], and its ensuing - and equally popular - TV version. Others point to the Baby Boomer population having left their years of youth and mobility and having turned instead to asking themselves fundamental questions about their roots and identity. Regardless of the actual cause, if one exists, it can be stated for sure that the interest in genealogy continues to increase at a breathtaking pace: "More than 100 million Americans have already started tracing their family roots, and many more may join them, as today's middle-aged adults seek their identities through their forebears." [Fulkerson 1995]. And close to half Americans have expressed an interest in their family history [ibidem].

What is it that people seek to uncover by researching their family's history? The answer lies in the benefits that are conferred both by the process and its outcome. Members of an extended kin participate in a family history project in two ways: first, by collaborating as active participants who contribute their own narratives, and second, by acting as the audience of the narratives told by others.

Information in a family history project flows through family stories, that is, stories told by members of a family that tell about its shared past. As we shall see in the coming paragraph, the benefits of learning about this shared past are as rich and as numerous as those obtained by telling others about it.

Family storytelling holds benefits for both the teller and his or her audience. The act of listening and learning from stories bestows the benefits of identity, guidance and enrichment upon the audience; the act of storytelling casts the benefits of coherence, generativity and resulting human connections upon the teller. Finally, both teller and audience benefit from the sense of community and intimacy that is naturally fostered by storytelling about a common past.

2.1 Benefits for the audience

2.1.1 Identity

Vera Rosenbluth writes:

> *Besides giving us a sense of connectedness and [shared] family history, stories might reveal to us family traits that we have inherited, ancestors with whom we feel a special link, places in the world which now have a particular meaning to us [Rosenbluth 1997 : 12].*

In other words, family stories allow us to build upon a sense of self:

> *Just as an amnesiac who has no memory of his past has lost the sense of who he is, so do we need stories from our past to give us a sense of our own identity [Rosenbluth 1997 : 7].*

By emphasizing values and qualities of a particular family stories help us in both constructing and sustaining our selves, emphasizing our persistent traits and sense of belonging to our family group: "Family stories seem to persist in importance even when people think of themselves individually, without regard to their familial roles. The particular human chain we're part of is central to our individual identity" [Stone 1988 : 7].

Modern inability to identify with our former selves is signaled by Keniston as one of the main symptoms of psychological loss induced by abrupt change [Keniston 1969] . According to [Kilpatrick 1974] this sense of identity is central to our perceptions of self. David Lowenthal concurs: "The sureness of I was is a necessary component of the sureness of I am" [Lowenthal 1985 : 40].

Identity is thus inextricably bound with continuity. Family stories that allow us to successfully identify both with our past selves and our forebears give us a strong sense of stability. "Ability to recall and identify with our own past gives existence meaning, purpose and value." [Lowenthal 1985: 41].

2.1.2 Guidance

To know anything ... we must know its effects; to see men we must see their works that we may learn what reason has dictated, or passion has incited, and find what are the most powerful motives of action. To judge rightly of the present, we must oppose it to the past; for all judgment is comparative, and of the future nothing can be known.

Samuel Johnson, *Life of Rasselas.*

Family stories provide blueprints "for understanding the experiences of everyday life that can help us as we go through the many stages of living... Although we make our own choices and choose our own paths, those paths can be illuminated by the wisdom –and sometimes folly- of those who have been in similar situations before..." [Rosenbluth 1997: 14, see also Bertaux-Wiame 1993]. As pointed by [Carr 1997], life events are but a sequence of interlocking mean-end configurations. Our own actions often constitute pre-programmed scripts that try to achieve particular states to reach a given goal [Schank and Abelson 1977]. New ways of attaining those goals can be discovered by learning about the past. John Byng Hall has written extensively about family stories amounting to scripts that successive generations may feel compelled to follow [Byng-Hall 1982]. These scripts can be guidelines for succeeding in life, as well as instructions for surviving difficult times "Family stories that come down through the generations are often ones of overcoming obstacles, and of courage and survival, and these can be inspiring in our own lives" [Rosenbluth 1997 : 7].

In those cases in which family stories concern themselves with disgrace and disaster, they often "offer coping strategies as well as stories that make everyone feel better" [Stone 1988 : 7]. Because of this, they offer not only guidance, but also hope: Stories "help us see possibilities, they give us what we need to envision a transformed future" [Haas-Dyson and Genishi 1994 : 243] . First heard during our early childhood, these stories continue to linger through adulthood, as repositories of knowledge and advice that one can turn to during difficult or trying times. "All of us, long after we've left our original families, keep at least some of these stories with us, and they continue to matter, but sometimes in new ways... The ancestral figures in them ... often become a major part of our imaginative life...

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They can, along with other powerful cultural archetypes, maybe from fiction or film, serve as our role models and guides" [Stone 1988 : 8].

2.1.3 Enrichment

Family history and genealogy give an added dimension to our lives by linking it with people and events that took place before we came to be. "A well-loved past enriches the world around us" [Lowenthal 1985 : 47]. Current circumstances acquire a new meaning when viewed as part of a chain of continuity; "The present when backed by the past is a thousand times deeper than the present when it presses so close to you that you can feel nothing else", writes Virginia Woolf [cited by Lowenthal 1985: 47-48]

Family stories allow us to understand the past, interweaving the history of our country or region with that of our ancestors and relatives.

Reflecting on pre-industrial times when children absorbed a sense of the past from their forebears, Margaret Mead writes that they could "measure time in meaningful biological terms, when grandmother was young, when mother was young, when I was young. Dates became real instead of content-less numbers in a history book, and progress, measured by steamships, telegraphs, and automobiles, could be related to the pictures of grandmother and grandfather as a bride and groom, or as pater-familias with a parent and aunts and uncles in a family picture" [Mead 1974 : 69]

[Ellis and Bruckman 1999] concur in stating that students learn history especially well when they do so through relating to the actual experiences of elders.

People, places and events become enriched by the past and its stories, and these in turn enrich our present by linking it with the life and times of those that came before us.

2.2 Benefits for the tellers

2.2.1 Coherence and continuity

To make meaning in life is to create dynamic narratives that render sensible and coherent the seeming chaos of human existence

Dan P. McAdams

One of the main benefits of the telling of life and family stories is that of coherence. Simply being able to watch one's life from a temporarily detached perspective and see it unroll and unfold as a narrative, with its own particular design and purpose, gives coherence to the story of one's life. When sharing their life stories, people come to terms with the experiences they went through, realize how their personalities developed through time, and integrate diverse aspects of their lives. Sharing episodes of one's life thus allows participants to connect their pasts with their presents. This serves a critical function in solidifying one's identity "Especially as we age, looking back to childhood and young adulthood allows us to integrate those images of our former selves with who we are now..." [Rosenbluth 1997: 10]; see also [Keniston 1969].

2.2.2 Generativity

Related to the above, family storytelling also gives the teller the satisfaction of passing down his knowledge and wisdom to the coming generations. Psychologists term this *generativity*. According to Erikson, generativity is the healthy impulse of adults to "give back", to foster, nurture, encourage and guide those that will succeed him [See Bertaux and Thompson 1993 : 7]. Though focused on one's own descendant, generativity can expand to encompass a family group, a tribal collective, or even a whole country or people. In any of those cases, generativity has two steps: the first one involves the creation or elaboration of a product of the self –"a child, a book, an idea, a piece of wisdom", and the second a selfless and caring surrendering or handing of this product to others [McAdams et al 1986]. But there's more to generativity than just transmission. Adults experience through this a satisfaction that their creations will survive them and will help others beyond their own death:

> *The hope... is that the things that man create... are of lasting worth and meaning, that they outlive or outshine death and decay, that man and his products count [Becker 1973 :5].*

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In her book *Tracing Your Roots through Oral History* Willa Baum tells of an oral history project whose goal was to document the past of a community. After the project ended, contributors reported that the greatest reward of having participated was that they "had become immortal to the youngsters of that region, at least as long as newsprint and tape and slides will last." [Baum 1981 : 53]. Through the telling of family stories that will travel down the generations, adults give their descendants an elaborated product that will outlast their own lives and will continue to be of use and serve as inspiration to those that come after them.

2.2.3 Human connections and therapeutic value

[Rosenbluth 1997] and [Stahl 1989] concur in pointing out that "our culture is miserly in what it recognizes as appropriate avenues for developing a sense of intimacy" [Stahl 1989 : 38]. To Stahl, storytelling about one's life is an instinct, an impulse as necessary and strong as hunger or love. Rosenbluth concurs: "People need to tell the stories of their lives to others... In a world where we are cut off from the small community where everyone knew our life story, in a society in which people feel alienated from one another, people tend to confide in the hairdresser, the cab driver, or the bartender" [Rosenbluth 1997 : 9].

When people tell personal narratives, writes [Stahl 1989 : 37], "they offer their listeners an invitation to intimacy. They expect their listeners to listen because both they and their listeners know that this is one very effective (and acceptable) way to create and enjoy a sense of intimacy". In fact, "by exchanging personal narratives, people create intimacy where it might not have existed otherwise" [Stahl 1989 : 38].

This is precisely the feeling reported by Dan P. McAdams, who, during the course of his research, ran a series of life-story interviews: "When I play the [interview] tapes back I am listening with an analytic ear... Yet my students and I cannot help but develop strong feelings of affection and intimacy for the people we interview, and it seems that they form strong feelings for us, as well..." [McAdams 1993 : 252]. At the end of each life-story interview, McAdams reports:

> *Most people report that the experience of their telling their stories was profoundly satisfying and enjoyable, even if they had shed tears in the telling. They often ask not to receive payment for the interview, for they feel*

that they have already been rewarded by the experience itself [McAdams 1993].

According to Baum, the benefits of oral history encounters are so great that every such project has a tale of "the declining oldster" who "began to recover under the attention and importance and the moral obligation to get memories down." In fact, she adds, one of the often discussed problems of oral history programs is "what to do with your revitalized narrators, who instead of dying quietly away after the project is finished, continue to call the office to offer more services" [Baum 1981:51]

There is no doubt that reminiscing and telling personal stories has great therapeutic value [Rosenbluth 1997:10].

2.3 Benefits for all involved

2.3.1 Community and intimacy

If we took time to listen to one personal narrative each day, much of the loneliness in this world would disappear [Stahl 1989 : 38].

Family storytelling "creates a human bond, a connection that is very important and meaningful. And that kind of communication is always healing. When we share our memories, whether happy or sad, our philosophies and insights, we celebrate the most human part of ourselves" [Rosenbluth 1997: 10-11]

Stories passed from one generation to the next "solidify everyone's sense of belonging" by narrating the actions of common ancestors and relatives. They function, in this sense, as "a kind of glue" [Zeitlin et al 1982: 16], binding the generations together and cementing by sharing a common experiences. In any storytelling occasion, the storyteller "declares and shapes important relationships through the mediating power of words. Thus, in sharing stories, we have the potential for forging new relationships" [Haas-Dyson and Genishi 1994 : 5].

Family storytellers also enrich their community by the exchange of differing perspectives. The images and rhythms of stories "reverberate in

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the memories of audience members, who reconstruct the story with the stuff of their own thoughts and feelings. In such ways, individual lives are woven together through the stuff of stories" [Haas-Dyson and Genishi 1994 : 5]

The act of cooperating in the creation of a collective narrative gives tellers and audience a sense of a shared past. Donald Ritchie relates his experience in the D.C. City Lights Program, who brought together scholars, storytellers and senior citizens together to talk about their common culture and history. One of the participants concluded: "We were strangers before... Now we understand that our common ground is the African American heritage that we share" [Ritchie 1995: 187].

In a similar way, the telling of family stories can bring extended kin together by reminding them of their common past. "My parents, my sister and I make cryptic references to incidents and people just as did the grandparents..." – writes Kim Garrett – "I wonder if our children and grandchildren will know what these references mean... I hope so, for it is by such tenuous yet strong threads that the generations are knit together" [Garrett 1961: 281]

3 BROKEN CHAINS AND SPLINTERED SHARDS: PROBLEMS AND ISSUES IN FAMILY STORYTELLING

3.1 Pasts we have lost

The benefits of participating in a family history should by now be apparent. But, as has already been stated in the preceding pages, in spite of the many benefits to be reaped by carrying out and participating in such a project, interest in researching one's ancestors and finding out about one's family's past is a relatively recent phenomenon. Using hasty reasoning on this latter statement, one may come to the conclusion that our ancestors themselves were not interested in their own past. This, of course, is not the case. As we shall see in the coming pages, the urge to know about one's past, and to tell and hear stories about it, has accompanied mankind through the ages down to our own present time: it is safe to state that our ancestors' were as interested in their immediate past and their forebears as much as we are.

The fact people of earlier times were not as keen on the genealogical inquiry stems not from a lack of interest in their past, but rather from a lack of interest in the act of researching and recording it. What our ancestors were not interested in is in *investigating* and *laying down the results in writing*, for reasons that will soon become apparent.

Flattering though it would be to think otherwise, our interest in genealogy and family history lies not in a heightened perception of the past on our behalf, but in the social changes that have brought about the disappearance of those institutions and structures that were in charge of continuity and the transmission of knowledge down the generations. Far from being the first to show an intense curiosity about our own pasts, we are among the first to suffer from its absence.

3.2 Family transmission and storytelling in preindustrial households

In preindustrial times the home was the center of family life, as well as the basic unit of economic activity. Up to four generations of the same family shared a single household. Extended kin where always nearby, with most of them living within walking distance. This ensured the geographical proximity of elders to young people. [Smith-Barusch and Steen 1996]. During meals, holidays and family reunions, all members of the extended family would come together.

> *Children used to grow up simply absorbing information about their families, knowing the stories and passing them on to their own children when they in turn became parents [Rosenbluth 1997].*

Members of an extended family were thus vividly aware of their group's past and their immediate ancestors, because they had either met them themselves or were in close contact with relatives who had. Time flowed slowly, with each decade resembling the one that had come before. Social and commercial relations were steady. Families occupied the same regions and interacted with the same groups their ancestors had been in touch with for centuries.

All this, however, changed abruptly with the advent of industrialization: instead of land labor, handlooms and the spinning machines of old, there came factories, raw materials and manufactured goods. People started working away from home and commuting long distances. The main reason was the new organization of labor and the demands it created: instead of clustering around relatives, and doing whatever job came to them, people for the first time started moving *to* jobs. As industrialization proceeded, only the nucleus of the family stayed at home [Smith-Barusch and Steen 1996]. With the extended family scattered and dispersed, the many legacies that one generation passed to the next all but disappeared.

Given this scenario the fact that we now show a strong interest in researching our past is not surprising. Unlike that of our ancestors, our grasp of the past is as fragile as it is faint.

But how did this come to happen? How did the chain of transmission come to a full stop? What are the aspects of our current lifestyle that prevent storytelling within families?

3.2.1 Geographical dispersion

The main culprit behind the rupturing of continuity of family storytelling is geographical dispersion. In preindustrial times the closeness of family members allowed prolonged contact fostering intimacy and providing ample occasions for storytelling (oral transmission). Anecdotes, stories and genealogical information would thus flow from one generation to the next. Nowadays, however, extended kin live far from each other [Huber 1996, Fischer 1984]. Because of this, not only do young family members grow up in an environment that differs significantly from that of their elders, but chances for prolonged contact are also diminished

> *Our mobile lifestyle has spread families across the country, and with increasing frequency, across the oceans. While children and their grandparents may have close and loving visits, they rarely have day-to-day contact with one another. There is, therefore, far less opportunity for the telling of family stories within the context of daily life than there used to be [Rosenbluth 1997].*

Oral transmission depends on the possibility of active tradition bearers finding sufficient occasions to impart their materials to others. If a tradition bearer migrates from an area or dies before imparting his materials, the material in question will die out in that place [Von Sydow 1948]. In parallel fashion, without a time and a place for extended kin to sit together and listen to each other, stories about a family's past are no longer told, no longer memorized, and with the passage of time, inevitably become extinct.

3.2.2 Competing media

Another significant factor in the devaluation of family stories is due to competing media, namely movies and TV. Television offers 24-hour programming with vivid images, constant entertainment, high suspense and a sense of reality that, from a superficial standpoint at least, few narrators can aspire to match. Writes Zeitlin:

In the days before radio and television, storytelling was the major source of family entertainment, and traditional folktales were commonly handed down across the generations... But in the twentieth century movies and later television began to tell us stories in powerful visual images. Costing millions to produce, today's films employ an extraordinary technology and draw on the nation's most gifted actors, directors and writers. Next to them, a grandfather telling stories about his childhood hardly seems as amusing [Zeitlin et al 1982: XVII, see also Rosenbluth 1997 : 5].

Verbal stories from the past can't match the audiovisual capabilities of TV shows. Thus elders' narratives come to be regarded as little more than antiquities.

3.2.3 Accelerated change

Yet another aspect of modern life that hampers storytelling is change itself.

It used to be that stability was the most dependable feature of the social landscape now change is the norm [Rosenbluth 1997 : 2].

The job of many of today's college graduates did not exist and was not even imaginable at the time they were born. This frantic pace in turn makes change more apparent and noticeable: transformations that in earlier times unfolded through decades now come to happen in a matter of weeks or even days.

Technological changes that were the science fiction of our parents are the commonplaces of our children – trips to the moon, television, speeds greater than sound, digital computers [Keniston 1969].

Similarly profound changes have taken place in the social sphere. Shifting gender roles, new modes of communication and innovative ways of approaching work and leisure mean that the present can no longer be made sense in terms of the past.

The result of this is that storytelling occasions often become frustrating. Elder family members have a hard time selecting those stories that may be applicable. Younger members find it equally hard both to ask further questions and make sense of what was told, and the life experiences of

their forebears come to be perceived as "colorful tales of the past rather than practical lessons for the young" [Smith-Barusch and Steen 1996].

4 PRESERVING STORIES, MAINTAINING COMMUNITY: THE POWER OF PLACE

4.1 Mamaw's house: a family story

In *A House as Symbol, A House as family*, Lynda Dixon-Shaver [Dixon-Shaver 1995] tells the story of a Cherokee clan that successfully fought the dissolution of family links, mainly thanks to the efforts of its clan matriarch, "Mamaw".

> *Mamaw's hands-off hospitality always encouraged family members to gather at her house for succor; holidays, reunions and peace... The house became a refuge, a sanctuary, a time-out zone for any family members.*

This hospitality extended itself to family reunions which this family continued holding through the years.

> *One of the results of these gatherings was that the generations of Mamaw's family who had given up their Cherokee identity became reacquainted with their nation, their clan, and their traditions.*

After the death of Mamaw in 1990, fears of disintegration spread through the family. But the venerable clan mother knew better and had actually anticipated the situation before passing away:

> *A provision of [her] will was that the home be left as it was: furnished, operational and structurally maintained so that "if anyone needs it, it would be there as it had always had been". The home would be the center of reunion of the family.*

As word of this passed through the family, their fears of dissolution vanished. Writes Dixon-Shaver:

> *The 1995 reunion after Mamaw's death was as big an event as the 1992 gathering... At various times of the summer family members still return "home" to Mamaw's house.*

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Interestingly enough, the house remains the symbol of the family, while at the same time it continues to welcome relatives at different times of the year. The house maintains its importance, but it is "not necessarily a shrine that must be kept inviolate". Rather its persistence seems to be of an organic, dynamic nature, with modifications and changes taking place without conflict:

> One child who lived there for several months changed the wallpaper in Mamaw's bedroom. Another spent part of a summer there and painted the woodwork a different color. Rearrangements of the furniture seems to happen whenever anyone is in the house for more than a day.

In spite of these modifications, the house remains recognizably the same, a safe haven to which family members return once and again. The importance of having a place to return to, a place to share stories and keep links with extended kin alive, cannot be overestimated. In fact, writes Dixon-Shaver:

> All the members of this Cherokee clan are family – because of Mamaw and this house

The preservation of this house both as a refuge and a center for reunions allowed this family to successfully fight and counter those tendencies that lead towards dissolution of extended families in modern times. They key to maintaining community was having a place in which meetings could literally "take place".

The story told by Dixon-Shaver is inspiring and powerful. Mamaw's Cherokee clan was successful in keeping its tradition and group identity alive though the years.

However, this demanded constant effort and attention on their part. The actual house was kept in shape thanks to a small trust to which all family members contributed. Probably the main reason that this persistent Cherokee clan was able to maintain a fund with this goal in the first place is the fact that their aim was to preserve rather than create community among extended kin. The bonds between family members were alive and strong; the family center was an existing institution. Thus the family as a whole had a strong interest in maintaining and preserving this symbol and center of its roots on which their group identity was grounded. In such a

situation, strong feelings of community were already present as was the accord in the importance of preserving them. Thus a fund was constituted for that specific purpose.

But starting such an effort from scratch may be next to impossible when links among extended kin have weakened significantly or have even disappeared years or decades ago. The benefits of identity and continuity that establishing a place for family reunions bring about only become apparent through the years; persuading scattered kin of the convenience of investing funds in such an effort will in most cases turn out to be an impossible enterprise. Besides, the actual cost of maintaining a physical house in good condition for the sole purpose of holding family reunions at regular intervals is probably prohibitive and beyond the practical and economic means of most modern families. As Margaret Mead writes:

> *Wealthy families with several generations of affluence may maintain a summer home, where sets of children and grandchildren spend part of the summer, but this has not become a life style to which the middle class aspires [Mead 1974 : 68].*

In spite of this, the need for places is unavoidable. Storytelling, continuity and identity, however, remain inextricably linked with it. As the sociologist Ray Oldenburg writes

> *Experiences occur in places conducive to them, or they do not occur at all. When certain kinds of places disappear, certain experiences also disappear [Oldenburg 1999 : 295].*

The conclusion is inescapable: place is a necessary requirement in order to maintain and rekindle community among geographically dispersed kin. In the words of Amy Jo Kim:

> *A community cannot exist without gathering places [Kim 2000 : 29].*

What to do then? A strong hint can be found in a statement written by one of our Cherokee clan mother's descendants:

> *When I mention home I do not refer to the wood and the nails but rather to the concept of family, which roots itself in such structures...*

In other words: it is not the physical place that is significant, but the feelings of community that it engenders and the possibilities for exchanging stories that it affords.

The solution should be by now readily apparent. It lies in the possibility of creating a place in cyberspace, a place that will act as a center for family reunions, meetings and other forms of community among extended kin.

We are fortunate in that the very technological advancements that engendered the problem of dissolving community in the first place now hold the key to restoring it. Building and maintaining a physical house from scratch is costly and difficult, but building a virtual place with similar features is not nearly as expensive or demanding.

4.2 Is virtual space a place?

The dispersion of kinship brought about a number of ways for keeping in touch with extended kin. Vacation or holiday meetings where members of the family from different states gather together for visits and celebration are one of the most common means that American families use to cope with distance. This, of course is only a palliative remedy, as they take place on specific dates and usually do not last long.

Another common way of keeping in touch is by sending short letters or postcards. Last but not least, families make frequent use of the telephone to keep in touch [Mead 1974 : 69]. Other technologies exist that enable family members to communicate almost instantly. E-mail has become a favorite substitute of postal mail; instant messaging allows relatives to chat with one another with ease.

But is the internet really conducive to the telling of family stories? Does the infrastructure it provides suffice for rekindling a sense of community? Is it really a *place*?

In his article "There is no there there", John P. Barlow [Barlow 1998] asks exactly the same question:

The language we use implies that cyberspace is a place as tangible as France or St. Louis or the coffee shop on the corner. But why, exactly, should we think of the Internet as a geographic location?

Later on, Barlow ponders the nature of telephone conversations. Is a telephone call a place?

I recently participated in a telephone conference call with people in several other states and countries. Were we all together in another "place"? I doubt that any of us thought so.

A similar point is made by Stephen-Doheny Farina in The Wired Neighborhood, concerning both telephone and e-mail:

No amount of telephone conversations and e-mail can re-create the experience of sharing daily life... When I hear people close to me talk of leaving, part of me wants to dispense with them immediately. Of course I cannot do this; one doesn't eliminate emotional ties so coldly. I act as if I believe that after my friends or family members move, we can maintain our relationship by keeping in touch with technology. But we cannot really maintain those relationships, because over time the foundation for our relationship, the social and geographical ties of a common place, fades [Doheny-Farina 1996 : 34].

Both Barlow and Doheny-Farina are touching upon the right issue. Neither telephone conference calls nor e-mail are "places". As far as conference calls are concerned, in order to start a group conversation, one must dial a number, wait for the other party to respond, and invite him/her to join. As an alternative, the other party can call and join by him- or herself. But in any case the meeting has to be arranged and organized: fixed schedules must be followed and time differences respected and accounted for. The conversation takes place for a specific purpose, and it is terminated as soon as its goal has been satisfied. After one has hung up, nothing remains of the conversation.

E-mail is similarly limited and it is more akin to a signal carrier system than to a place. E-mail groups can to a certain extent constitute communities; but they are extremely limited in their plain arrangement and the linear nature of communication that they establish. Similarly to an exchange of letters, e-mail does not exist beyond the messages that get sent through it.

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Fortunately, other CMC (computer mediated communication) technologies exist that differ from telephone calls and e-mail in precisely those aspects that bring them closer to the definition of "place". I am referring to chat rooms and debate forums. Three aspects set these technologies apart from other communications media: persistence, history, and accessibility.

4.2.1 Persistence

In contrast, internet chat rooms and forums **persist** through time. Places exist independently of our entering them. When we leave, they remain. We can return and find them where we left them, essentially unchanged. Similarly, a chat room -even an empty one- or a debate forum page –even a page that no one has visited in a long time- both have the potential to stay there indefinitely. CMC tools allow us to go back to the spaces they support hours, days or weeks after we last accessed them.

4.2.2 History

Because they are persistent and potentially visited by others, CMC spaces can have a history. Actions by others go on regardless of our being present or absent. As in the case of Mamaw's house above, virtual spaces are liable to be modified or built upon by others; upon our return, these modifications will be apparent and visible. Similarly, one can leave documents sitting in a server awaiting further retrieval, or post messages or files for other people to read and download.

4.2.3 Accessibility

One can enter and leave chat rooms at will, and drop by to read forum pages anytime. Both will be there, with chat rooms probably filled with people busily carrying on their lives and forums showing a number of new, recent postings. In either case, no arrangements need to be made and no schedule needs to be followed to access them. Virtual spaces have an existence and a life of their own. The fact that one can stumble upon people just as in real life endow chat rooms with a strong sense of immediacy and presence:

> *Chat rooms offer a sense of immediacy that, for many people, bring the concept of the "global village" to life. Even when the conversation is inane,*

making a connection a 3 AM with a like-minded soul from a different part
of the world can be a powerful experience [Kim 2000 : 39].

Speaking of his experiences on WELL conference rooms, Howard Rheingold writes:

> *It's like having the corner bar, complete with old buddies and delightful newcomers and new tools waiting to take home and fresh graffiti and letters, except instead of putting on my coat, shutting down the computer, and walking down the corner,* **I just invoke my telecom program and there they are. It's a place** *[Rheingold 1994 : 24].*

Virtual places lack the physical, tangible quality of the real world, but at the same time they share enough features that they can satisfactorily support different kinds of social interactions. In fact, virtual places can not only sustain these interactions, but – as will become obvious in the next section - can enable participants to become or maintain a sense of community.

4.3 Maintaining community

4.3.1 Defining community

We have come to the conclusion that having a place to meet is a necessary requirement for maintaining community. But what, exactly, is a community?

Perhaps the best definitions of "community" and "virtual community" are those offered by Amy Jo Kim [Kim 2000 : 28] and Howard Rheingold [Rheingold 1994 : 5].

In order to get at the essence of community, Kim discusses diverse groups who share common interests or activities:

> *How do a group of people become a community? Are the people who show up at church every Sunday a community? What about that group of guys shooting pool at the neighborhood bar? Or those moms chatting on the park bench as they watch their kids play? And those Star Trek fans, sitting alone*

in their living rooms, watching the same TV show week after week – are they a community?

The answer, Kim continues, depends on how you define the term

> *I remember being at a conference ... and listening to a parade of Hollywood executives brag about the size of their "communities". I was confused at first, until I realized that they were referring to the people who watched their TV shows... What mattered to these executives was their ability to estimate audience size and demographics – they didn't give a hoot whether their "community members" were talking to each other.*

Star Trek fans who don't know each other are thus not a community. Having a common interest or activity is a start, but the requirements for community are higher:

> *A community is a group of people with a shared interest, purpose or goal who get to know each other better over time [Kim 2000 : 28].*

This is independent of whether the group in question meets in the real world or on-line. Howard Rheingold's definition of virtual communities places its emphasis on the same human aspects:

> *Virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace [Rheingold 1994:3].*

It is thus safe to state that community arises from repeated encounters and interactions that derive in closer acquaintance with other members and a higher emotional involvement in these interactions.

4.3.2 Community, genealogy and family history

As discussed in 2.2.3, few activities are more conducive to mutual acquaintance and intimacy than personal storytelling and collective

reminiscing. A group of people that regularly get together on-line with the purpose of discussing their shared past is thus not only a community, but one whose avowed goal directly promotes the forging of those personal links on which the very concept of community stands. In fact,

> *Some say that community is based on blood ties, sometimes dictated by choice, sometimes by necessity. And while this is quite true, the immeasurably stronger gravitational field that holds a group together are their stories* [Pinkola-Estes 1993 : 29].

As stated in 1.2 one of the goals of this thesis is to provide a set of guidelines for implementing a community for genealogy and family history. These guidelines will be found in the final chapter of this thesis. But before designing our own on-line community from scratch, we need to take a look at existing systems and tools that support these kinds of interactions.

5 INDUCED CONTEXTS FOR STORYTELLING: THE INTERVIEW PROCESS

Older people rarely have the occasion of telling the stories of their lives to the children. And yet, we can't afford to wait for an occasion that might never come. Fortunately, we can create the opportunity for telling family stories with a simple interview [Rosenbluth 1997 : 9]

5.1 The interview as induced context

After having come to the conclusion that the disappearance of the extended family and its lack of a place to meet is the main culprit behind the decline and fall of family storytelling. Starting from this premise, we have come to the conclusion that creating an on-line environment with place-like qualities is a viable venue for the resumption of family storytelling and the creation of community among its members.

Creating a virtual place, however, is a necessary but not sufficient condition. As we have already observed, the key to oral transmission in preindustrial extended families was the geographical proximity that allowed prolonged contact throughout extended periods of time. This provided ample opportunity for storytelling, including the due repetition and gradual memorization of relevant data.

A virtual place solves the spatial half of the equation providing extended kin a place to meet. But there's little we can do to remedy the other, temporal half. Cozy and hospitable though our on-line environment may be, families can't move there, nor stay for prolonged periods of time.

Fortunately, genealogists and family historians have faced and solved this very same problem a long time ago, for the simple reason that spending a year living with a relative in order to hear and memorize the stories he or she can tell is, to say the least, a highly impractical proposition.

With the disappearance of those contexts that facilitated the transmission of family stories, family historians must resort to creating an *induced context*. In other words: a deliberate, predetermined and formalized

situation that encourages and fosters storytelling [Zeitlin et al 1982: 265]. This induced context to which genealogists and family historians turn time and again to obtain their materials is, quite simply, the interview.

The interview is defined as "a face-to-face verbal interchange, in which one person, the interviewer, attempts to elicit information or expressions of opinion or belief from another person" [Maccoby and Maccoby 1954 : 449].

To substitute for memorization that naturally occurs through prolonged contact, the exchange is usually recorded using some kind of media that allows for later access and processing of the exchange.

5.2 Stages of the interview process

The interview process is divided into three stages: preparation, execution and annotation of the resulting material.

5.2.1 Preparation

Choosing a theme

The first step in preparing an interview consists in the selection of a specific topic area or conversational framework. Themes may be extremely broad ("Childhood memories", "Growing up") or extremely specific, related to particular people or events in a certain locality. Theme selection aids both the interviewer and the interviewee, facilitates the preparation a questionnaire and lays out the foundations necessary to carry out any required preliminary research.

Setting the theme of an interview and announcing them to interviewees allows them to better prepare for the encounter in advance. Knowing what topic a conversation will be about will often make the exchange more predictable. This will have two effects. On one hand, it will lower any potential anxiety and fears. On the other, knowing about the theme of discussion will often encourage respondents to bring additional materials with them, such as certificates, photographs, and other documents or objects that may enhance the quality of the actual exchange.

Preliminary research

Interviewers must spend some time in advance researching the theme they have selected and the sources. They should familiarize themselves with:

- **Historical and communal events** both events of national relevance and those of local level which are significant to the specific to the community under study. Interviewers attempting to record the history of a group often study the impact of larger events on the community of their interest, either through reading basic history textbooks, or by checking local documentation such as population records, letters, local newspaper archives.

- **The names, kin and social relationships of members of the group under study**: Oral historians and folklorists coincide in suggesting that it is convenient in approaching a new group to record not only the name of group members, but also existing kinship relations, their social status, and the locality to which each person belongs. Family bibles, local census and business registers, school diplomas and birth and death certificates are the sources usually consulted to obtain this kind of data beforehand. In those cases in which this information is not readily available, it is acceptable to record this information in a progressive fashion as interviews proceed. In any case, it is usually a good idea not to restrict this initial inquiry to any pre-specified pattern. Data about specific people that may be initially perceived as insignificant sometimes turns out to have compelling social importance. For this reason it is advisable to record just about any information about each person that may crop up during initial contacts.

- **Towns, buildings and other geographical locations:** events in narratives are associated in both individual and social memory with the localities in which they unfolded. "Attachment to geographical localities contribute fundamentally to the formation of personal and social identities... Places and their meanings are continually woven into the fabric of social life, anchoring it to features of the landscape and blanketing it with layers of significance" [Basso 1996]. Understanding narratives often requires having a basic mental map of the place where action takes place; for this reason it makes good interviewing practice to acquaint oneself with the environment in

which the community to be interviewed resides as well as with important buildings and landmarks within that region. Doing this in advance of the interview makes good sense. Most places will be readily accessible for physical inspection by the interviewer, since he or she must either reside in the location where respondents live or have traveled to their area of residence in order to meet them. Exceptions to this are exiled communities, migrants or survivors of natural catastrophes. In interviewing such groups, whose native geographical localities persist only in their memory, it is vital to attempt to reconstruct the localities using either at least a hierarchical list or a rough sketch of the area in question to be used as references.

- **Finally, specific technical, cultural or social information** may be required by the interview theme. As it has already been stated, some interviews are broad in nature, while others are extremely domain specific. Whereas most people are in possession of the knowledge required to ask a grandfather about parenting skills, additional specialized knowledge will probably need to be obtained before an interview can be carried out to ask nuclear engineers about their careers, pottery makers about their wares, or practicing members of a religion different from one's own about the details of a specific ceremony. Similar difficulties may surface when interviewing just about any person whose religious, ethnic, professional or cultural background differs from one's own. In approaching a group or individual, the interviewer should familiarize himself with the basic technical, religious, social and economic aspects of the group that may have any bearing or impact on the theme he or she has selected in advance.

Preparing the questions

You do not know how paralyzing that staring at a blank canvas is; it says to the painter, 'You can't do anything'. The canvas stares at you like an idiot, and it hypnotizes some painters, so that they themselves become idiots. Many painters are afraid of the blank canvas, but the blank canvas is afraid of the really passionate painter who is daring -- and who has once and for all broken that spell of 'you cannot'.

Vincent Van Gogh. Letter #378 to Theo, October 1884.

The importance and usefulness of questionnaires in interviewing cannot be overestimated. Without them, interviewers are generally at loss as to what to ask, and interviewees have, as a result, a hard time finding stories and topics that are apt to be narrated.

Elderly people do not naturally 'break out' into story telling or life review even when offered an opportunity to convey their story to an interested audience... [Beechem et al 1998]

Interviews clearly benefit from having structure and orientation. In reporting the outcomes of a life review project that was based on free interviewing – that is, lacking any interview guides or any sort of preexisting questionnaires. [Beechem et al 1998] cite interviewers as stating: "I need a structure guide because I sometimes forget to ask a question that would give me a more complete client assessment" or "I get stressed out, especially if I don't know the interviewee well, and I have trouble organizing my thoughts". At the end of the project, the interviewers themselves suggested that a more structured approach would be helpful.

The need for questionnaires is confirmed by the number and diversity of guides available for use during interviewing, be it in a life story, oral history or folklore context.

The content of the actual questions is always subordinated to the pre-selected theme. In the case of oral history, the goal of the interview will often be to prove or disprove a number of hypotheses, or to find out about the motivations that led a person or a group to a specific action or

situation. In the case of family interviewing, however, the requirements are usually looser. We have no working hypothesis, no facts or theories to prove or disprove. So what is it that we want to ask?

The questions to be asked in a family history interview are those that heighten the benefits of storytelling for both tellers and listeners. The tool used for this is the life story interview. Although based on the life of a single person, life stories necessarily bring up the moments and actions shared with relatives: "The intermingling of family and personal history, even some sense of public history beyond them, can be found in innumerable personal accounts" [Thompson 1993 : 14]. The distinction between family stories, life story and personal narrative as genres is thus often porous and fluid [Stahl 1989 : 23]. Equally important, telling one's life story necessarily involves resorting to preexisting narratives that both pre-date and sustain one's own.

> *Telling one's life story requires not only recounting directly remembered experience, but also drawing on information and stories transmitted across the generations, both about the years too early in childhood to remember, and also further back in time beyond one's birth. Life stories are thus, in themselves, a form of transmission, but at the same time they often indicate in a broader sense what is passed down in families [Thompson 1993 : 13].*

As many life and family history questionnaires templates exist as there are books published on these subjects (see, to cite just a few examples [Atkinson 2000], [Thomas 1989] and [Zillman Chapin 1997]). They all coincide however in grouping their questions along one of two main axes: the temporal and topical. In trying to obtain a narrative or series of narratives about a person's life or a community's history, to state that presence of a temporal axis is mandatory is almost tautological. Narratives flow through time; chapters and eras in individual or community history must be approached successively. But the story of a group or person also involves a number of topical areas at each stage. These topical areas correspond to the different roles and capacities in which individuals interact through time with different people and groups. [Stahl 1989] proposes a schematically representation of this interaction, consisting of a wheel chart that lists out the different categories significant in the formation and expression of identity:

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The family often teaches a sense of personal and local history, the ethnic group offers a sense of heritage and a self-consciously maintained corpus of folklore, religion provides ethical values; locality instills a sense of region and the environment; age groups give a sense of generations and time; sex-based groups create a sense of gender and personal sexuality; social connections are reflected in aesthetic preferences or taste; and occupational group usually determines (in America) one's sense of social class [Stahl 1989 : 35].
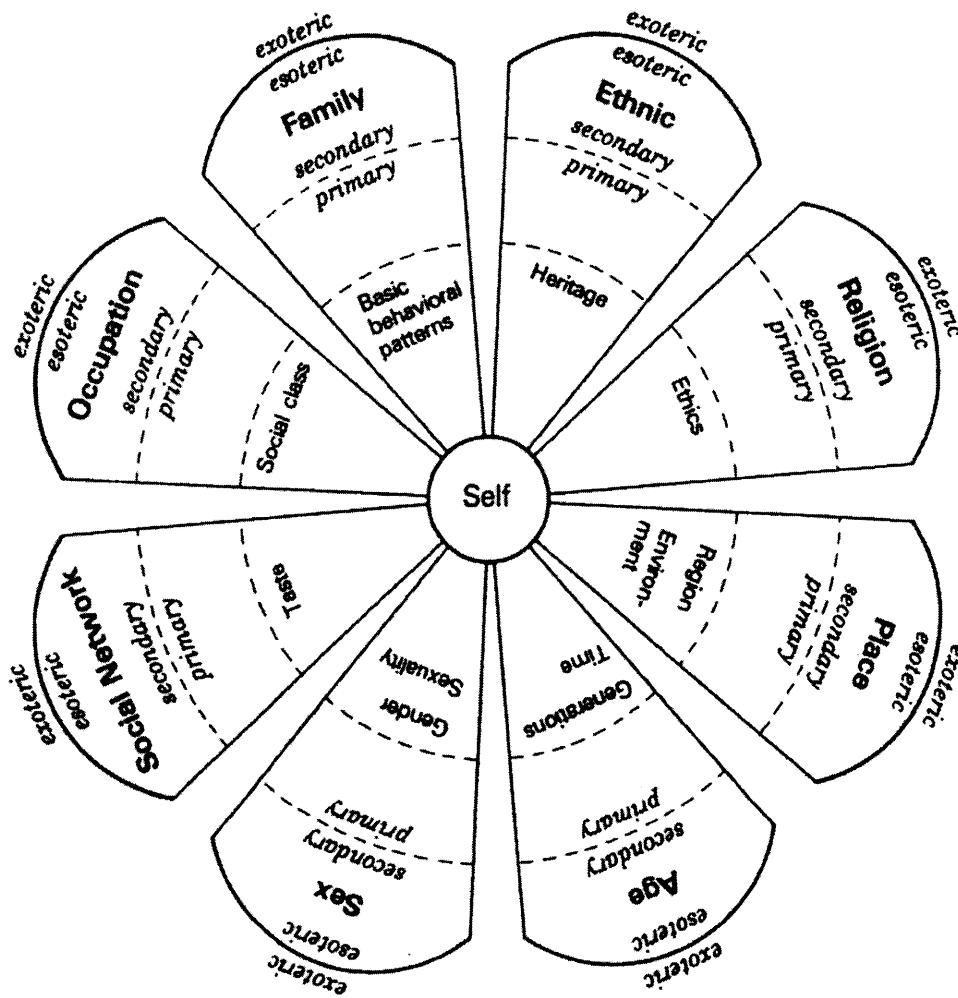
Figure 1: Dimensions of identity in personal storytelling [Stahl 1989]

Questionnaires can be grouped according to the strategies they use to navigate these temporal and topical dimensions throughout the interview process. As the interview, questions must be aligned through one of the

axes advances in order to preserve coherence and avoid repetition, with one of them being necessarily subordinated to some degree to the other. The life review questionnaire proposed by [Atkinson 2000] follows a main topical axis with sections whose subordinated questions progress through time. [Rosenbluth 1997] offers a somewhat more oblique approach, mixing the temporal with the topical in different question groups. Finally, the software Memories, [Brown and Blalock 1997] follows a temporal axis: chapters follow time eras which contain topical sections.

Titles of question topics in [Atkinson 2000]:

- Birth and family of origin
- Cultural settings and traditions
- Social factors
- Education
- Love and work
- Historical events and periods
- Retirement
- Inner life and spiritual awareness
- Major life themes
- Vision of the future
- Closure questions

A selection of questions concerning the interviewee's Education topic in [Atkinson 2000]. Questions are grouped in topical sections that advance through time:

Education

- What is your first memory of attending school?
- Did you enjoy school in the beginning?
- What do you remember most about elementary school?
- Did you have a favorite teacher in grade school? In junior high? In high school? How did they influence you?
- What do you remember most about college?
- What was the most important course you took in school or college?

Titles of question topics in [Rosenbluth 1997]

- Family background
- Childhood
- First school years
- High school years
- College
- Jobs
- Marriage
- Family life
- Career
- The rest of your life
- In general

Questionnaires arranged throughout the temporal axis attempt to bring respondents to tell their life stories following a chronological timeline and inquiring about the different social roles that the interviewee that has played in each period in iterative fashion. Questionnaires arranged through a topical axis proceed the other way around, presenting different social roles and then traversing each through time. No preference for either format is established in the literature and the format used in each case will probably be a combination of both that best suits each actual interview. But in any case the interviewer must allow the respondent to deviate from the axis he has chosen only to a certain extent, lest the interview lose all coherence and direction.

Good interviews are those in which respondents feel free to express themselves and go off unexpected topics, but which are gently nudged back to the thread of the conversation, so as to make sure that all topics intended receive appropriate coverage. In those cases in which the interviewee is perceived as having gone on too wide a tangent, the apt interviewer will not only stop him or her, but will also keep a mental or written note on the interrupted subject, so that it can be brought up again when the appropriate topic or time era is reached later on during the interview.

Selected chapters and topical sections from Memories. Chapters and sections have been have been extracted. Note the repetition of topics throughout chronological chapters.

Chapter 3: Adolescence

Jr. High and High School
Belonging
Sports
Pets and Hobbies
Work
Wheels
Bed and Breakfast
Sights and Sounds
Relatives
Friends and Relationships
Smiley
The Birds and the Bees
Me and My Parents
Goals and Dreams
Happy Times/Sad Times
Other Memories

Chapter 4: College Years/Early Adulthood
College
Sights and Sounds
Book Learning
Belonging
Sports
Friends and Relationships
Work
Me and My Parents
Spaces and Places
Life Learning
Goals and Dreams
Growing Spiritually
Happy Times/Sad Times
Pass It On
Other Memories

Chapter 5: Life as an Adult
More Book Learning
Children
Special Days/Family Events
Class Reunions
Goals and Dreams

Growing Spiritually
Famous People
My Closest Friend
Belonging
Growing Spiritually

5.2.2 Execution: carrying out the interview

With the background research concluded and the questionnaire concluded, the interviewer is ready to carry out the interview. As a verbal interaction, the interview presents a number of advantages in eliciting information over more informal conversations. In more spontaneous exchanges, goals and themes are loosely defined, and often mutually constructed as the dialogue progresses. To the contrary, interviews are highly-scripted events in which a) themes are predictable and constrained to certain topical areas, often announced and agreed upon before the initiation of the actual exchange and b) participants play out assigned roles, with the interviewer's goal being the acquisition of information, and the interviewees' responsibility that of supplying it. Even though no encompassing theoretical framework exists to explain how an interview is regulated, nor what the impact of context and personal factors affects the actual content and flow of the exchange[1], it is certain that interviews are governed by a number of implicit criteria. These can vary, but they often include, at a minimum, the following guidelines maxims

5.2.2.1 Maxims for the interviewee

(Extended and adapted and from [Sypher, Hummert and Williams 1994]. See also [Rosenbluth 1997 : 17])

Cooperation: That the interviewee respond the questions posed by the interviewer.

Relevance: That the interviewee's response addresses the content of the interviewer's questions.

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[1] But see [Mishler 1986] for a number of conceptual hypothesis on the influence of context and the importance of collaboration between interviewer and interviewee in the joint construction of meaning.

Quality: That the interviewee's response should be characterized by appropriate elaboration (commentary expanding on the question asked, or information associated with the commentary that would be helpful to the interviewer).

5.2.2.2 Maxims for the interviewer

Direction: That the interviewer will lead the exchange, presenting questions to the interviewee.

Sequence: That the interviewer will listen to the interviewee's replies, formulating new questions after he or she has processed them.

Coherence: That the interviewer's questions will follow certain explicit threads or otherwise appear to the interviewee to follow each other and/or the interviewee's replies in logical fashion.

5.2.3 Annotating the interview

Once the interview has been carried out, it must be properly processed, indexed and stored. At the very least interview recordings should be labeled with the name of the interviewee and the place and date in which the interview took place. It is also convenient to include the name of the interviewer and the name of the project for which the interview was recorded.

Transcribing, annotating and indexing the interview is hard and intensive work, but yields as a result the ultimate level of accessibility to its recorded contents. A proper index allows locating specific anecdotes and stories with little or no delay. "A useful index describes major events, anecdotes and stories... [A] completed index will convey the biography of an individual or the history of a community, just as a well-written book would" [Epstein and Lewitt 1994: 61].

Indexes are extremely useful for browsing interview recordings and as we have already stated, accessibility is all-important: recordings don't actually exist for other researchers unless they are accessible, that is, unless they've been properly indexed and stored.

According to [Epstein and Lewitt 1994 : 61] the keys most used by historians to annotate the oral materials they obtain are:

- Names of relevant people
- Geographic places
- Temporal periods and themes

As shall become evident in the last chapter of this thesis, these three keys correspond to the three same keys that researchers coincide describing as the three main indexes used for the tagging, encoding and retrieval of autobiographical memories. This should come as no surprise: given that the use of these three indexes is the natural way for humans to index their own memories, it is only natural to expect that this would also be the easiest, most intuitive way in which the memories of others will be indexed, searched and retrieved.

Table 7.1 Example of an interview summary sheet

Interview summary sheet	
Ref No:	Playback No:
Collection Title:	
Interviewee's Surname:	Title:
Interviewee's Forenames:	
Date of Birth:	Sex:
Date(s) of Recording:	
Location of Interview:	
Name of Interviewer:	
Type of Recorder:	
Total Number of Tapes:	Type of Tape:
Mono or Stereo:	Speed:
Noise Reduction:	Original or Copy:
Additional Material:	
Copyright/Clearance:	
Interviewer's Comments:	

Source: adapted from an interview sheet used by the British Library National Sound Archive

Figure 2: Example Interview summary sheet from [Drake and Finnegan 1994 : 171]

6 EXISTING SYSTEMS AND OTHER IMPLEMENTATIONS

The previous chapters have laid the theoretical groundwork for approaching family storytelling systems. This chapter analyzes a number of existing related systems whose features and shortcomings are relevant to the design of on-line communities that facilitate family storytelling.

6.1 The Grammy Mirk project

6.1.1 Description

The Legacy of Grammy Mirk, designed by Mike Brostoff, is a static web site that contains a collection of family stories about the author's late grandmother, Miriam Michelman, also called "Grammy Mirk".
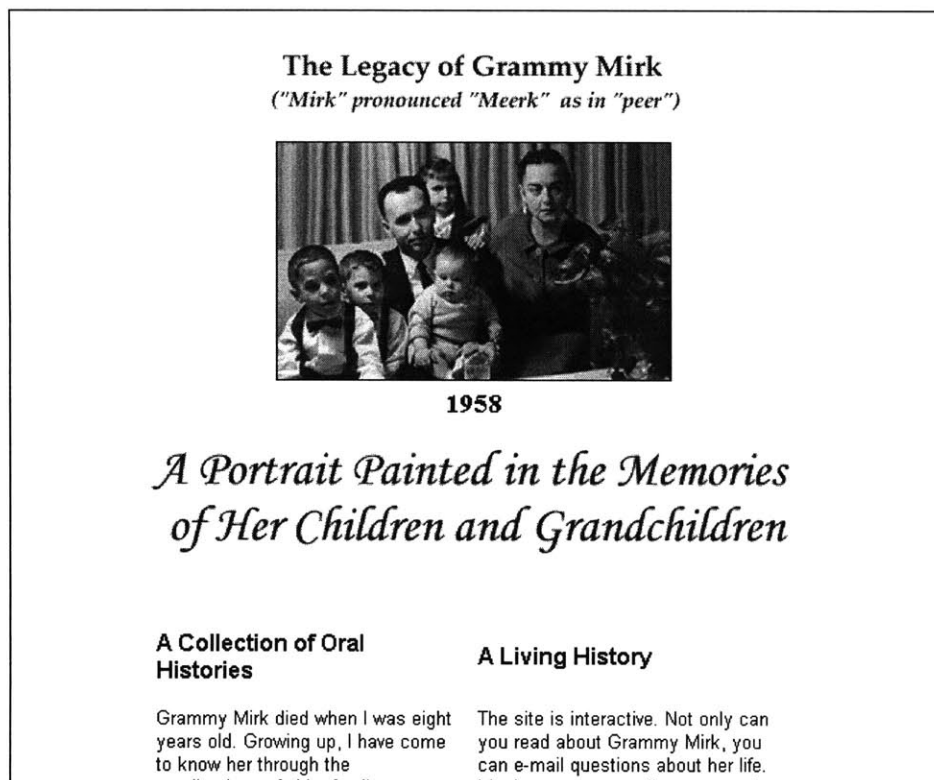
Figure 3: The Grammy Mirk Project Title Page.

In order to carry out this project, Mr. Brostoff interviewed each of his relatives specifically about their relationship to Grammy Mirk. These

family interviews were taped and later transcribed. Extracts from these interviews conform what Brostoff describes as a "composite sketch" of the personality, the life and the times of his grandmother. The main navigational tool is a family tree based on pictures of family members, each of which leads to the page in which we can find a transcription of that person's memories regarding Grammy Mirk.

Figure 4: The Grammy Mirk's Project's
Family Tree Navigation Page

Each page is cleverly arranged, starting at the top with a series of portraits of the interviewee in question at different ages. Speaking metaphorically about our previous selves, Vera Rosenbluth writes "We suddenly understand that each photo has contributed to the development of the next, and that the images are really of one person." [Rosenbluth 1997 : 10] The Grammy Mirk Project makes Rosenbluth's photographic metaphor real. Through aligning these series of portraits, Brostoff achieves a strong sense of identity and continuity through time.

Phil Brostoff b. 1923
Phil is Mirk's oldest son
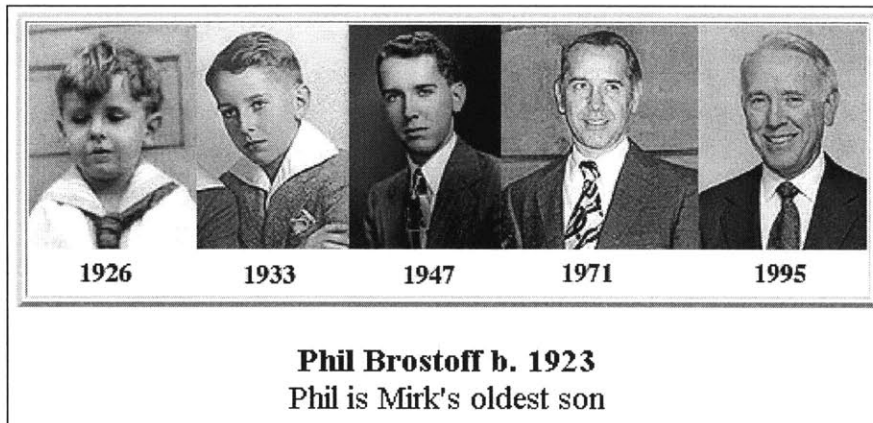
Figure 5: Continuity and identity – sequential portraits flowing in time

Portraits are not only aligned horizontally at the beginning of each page. They also appear throughout the text, linking each chronological section of the interviewee's Grammy Mirk stories with the temporal image of him- or herself at the time the narrated episode took place.

The Buried Treasure

Grammy would take me down to the beach all the time. She would sit there and she would read underneath her umbrella. Being a typical child, I would do ocean things like collect sea shells, swim in the water, build sand castles and dig my way to China. I can recall one summer day when I was quite intent on digging to that Asian country. As my hole got bigger and the further down I got, the sand would get colder and wetter. I even think Grammy would glance over to see my progress, just to make sure I hadn't disappeared. As I dug down, I noticed a bump in the sand. As I scratched and scraped, I began to squeal with the realization I had found something metal, most certainly a precious treasure. Grammy heard my yelps as I screamed, "I found something!!! I found something!!!" As the two of us excavated the find, we discovered an old charm bracelet that had bowling pins and balls dangling from the links. Grammy was as ecstatic as I was. She said, "Oh Michelle, this is so wonderful. We have to take this home and clean it." Grammy packed it carefully into her beach bag where it stayed until we got to the summer house. There I watched her carefully scrub it with a toothbrush to make sure it was completely clean. The bracelet spent the rest of the summer on my wrist .

Getting Smacked

I could only remember once when Grammy punished me. Looking back on it, I knew I had provoked the situation. I was watching her put on her makeup while she sat at her vanity. The light in the room was dusky and gold colored. I can recall how I watched her fingers arrange her long gray hair into elaborate twists and knots. We were chatting and somehow I lobbed some comment I knew was going to make her furious. She turned around and slapped me across the face. My eyes must have gotten as big as saucers, because I was so shocked I didn't say anything for several seconds. Oh, I bawled my head off and things settled down after that, but I'll never forget how I pushed Grammy's button that time.

When Janny and I were up there together, I could tell that she really enjoyed having both of us girls. Janny and I had a great time. We would read, go to the beach and play girl games. For some reason, I have this impression that Aunt Tess took Janny and I down to the beach all the time. She would walk us down there, while Grammy would work in her garden.

Figure 6: Pictures reinforce the time-frame of the narrative

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Relevant pictures of other relatives, situations or places mentioned in the text serve to reinforce the narrative and illustrate the memories of each participant.

The Grammy Mirk project allows visitors to learn about Ms. Miriam Michaelman's from different angles. Judy's testimony presents a harsh portrait of her mother:

> *Miriam (Grammy Mirk) never forgot a slight and weeks, months or even years later she would re-discuss the event as if it had happened yesterday. "Imagine, after all I did for them. All they can bring me for staying here at the Cape are a couple of loaves of bread." Worse yet, if you happened to be the recipient of mom's vindictiveness and landed on her personal shit list; you stayed there never to experience redemption. To this day, I shake my head at some of the angers and pettiness she permitted herself.*

This story conveys quite a few negative emotions, but other relatives give different accounts that paint a complex picture. Mike Brostoff, the author's site, writes:

> *My clearest memories of Grammy Mirk was when we visited her at Cape Cod the summer before she died. It was 1970 and I was eight years old.... Soon after arriving, I scouted out the area by bike. I was gone for some time and when I returned, Grammy Mirk was looking up and down the street for me. "Please, be careful where you go. When you are gone for a long time, Grammy worries," she said concerned, but not shaming...*

6.1.2 Discussion

After browsing the site's many pages, we not only get to know about Grammy Mirk's life and career, but also about her quirks, her hobbies, her preferences and her priorities in life. More than that, we learn about her diverse relationships with different members of the Brostoff family.

However, the Grammy Mirk suffers from a series of drawbacks:

Lack of interactivity

It would seem that the site was originally designed to be interactive. In the title page (See *Figure 3*) the author writes:

Not only can you read about Grammy Mirk, you can e-mail questions about her life. Maybe you want to direct a question to a family member about a specific story. Maybe there are aspects of her life you want to know more about. Your questions and their answers will be posted and become part of this dynamic and evolving history.

The original goal, then, was to support the work of a group of narrators that collaborate together in order to assemble a narrative mosaic of a common past. Unfortunately, this goal seems not to have been realized. A form for sending e-mail is active (see *Figure 7* below) but despite repeated attempts to post questions and contact the author, no reply was ever received. For all practical purposes, it seems the site seems to have been abandoned. It thus seems that this original goal of making the site interactive was never realized.

Lack of infrastructure

The Grammy Mirk Project seems to have been crafted manually. It is likely, that at least part of its charm lies in this hand-made quality. The price paid for this however is lack of flexibility. Adding stories to this site would involve re-editing and re-posting each affected page manually.

The interface for asking questions is minimal and superimposed upon the existing infrastructure of the site; that is, even though visitors can in principle send questions via e-mail, this is not the way that the narratives that constitute the actual foundation of the site were initially obtained.

The form includes the picture of the person to whom the question will be directed. But no direct way of reaching these informants is provided. Apparently, questions are intended to be relayed manually to their addressees by the site's author. In any case, no examples of such interactions appear in the site. This alternative seems not to have been used even once, so it is hard to measure how useful it would turn out to be.

As far as interview infrastructure is concerned, absolutely no help is provided for question asking. Users are supposed to enter questions in a blank form.

Figure 7: Blank form. Asking further questions to informants
in Michael's Brostoff's Grammy Mirk Project.

The interview process through which family members' testimonies were obtaining was carried out by following the traditional method of one person procuring, processing and publishing the information for all to read. As shall be argued in the final chapters of this thesis, this has a number of undesired consequences that need to be approached differently in order to better serve the goals of creating community among extended kin. Also, it means that the only the results of the interviews are present. Neither the questions nor the rationale through which the author came up with this specific set of questions in the first place appear in the site. Links to Real Audio clips with audio recordings of the conversations that form the basis for the pages' transcriptions are present, but unfortunately none of them seem to be functional.

One-person focus

Finally, the Grammy Mirk project is limited in that it only aims to "create a composite sketch" of the author's grandmother. The site is no more and no less than "a collection of oral histories of those who have survived her". As we have already seen, even stories about a single person almost unfailingly evoke memories in which other family members are related. Because of this, Grammy Mirk stories mention a number of different relatives. In spite of this, however, Grammy Mirk remains a central figure throughout the site. This makes the Grammy Mirk project quite limited in scope

6.1.3 Conclusions

In spite of the above drawbacks, the Grammy Mirk Project remains a fascinating piece of work. It seems to be a modest, one-person endeavor. Keeping that in mind, it is amazing that its author was able to achieve so much. Pictures and text are cleverly combined and the result is a lively portrait of Grammy Mirk's character.

The lessons to be learned from this site have to do with content organization and the layout of family stories.

- Narratives were obtained through an interview process, part of a one-person oral-history project aimed at creating a composite sketch of Grammy Mirk from the memories of those that knew her.

- Narratives are clustered around participants, and then ordered chronologically. Each person-page belongs to a specific family member and contains the memories of that person through time. This reinforces the identity and uniqueness of each family member.

- Sequential portraits at the top of each relative's page provide a powerful impression of time depth and continuity. Narratives are also heightened by the interspersing of other pictures that also correspond to the time-frame of each narrative.

- Selection of these pages is carried out through a family tree interface. Family trees are the most explicit visual representation of kinship relationships, and thus ideally suited for navigation within a site whose organization is based on personal pages of family members. (See 9.1.1).

6.2 AKA Kurdistan

6.2.1 Description

AKA Kurdistan [Meiselas et al 1997a] is a web site designed by Picture Projects as the official companion site to a book [Meiselas et al 1997a] and traveling exhibit entitled "Kurdistan: in the Shadow of History".

Similarly to the Grammy Mirk Project, AKA Kurdistan cleverly combines pictures, time and narrative to build an image, not this time of a specific person, but of a people and a culture: The Kurds.

The Kurds are a Middle-Eastern people who number about 15 million spread throughout Armenia, Georgia, Kazakhstan and Syria. Despite their long-standing occupation of the areas they inhabit, the Kurds were never able to consolidate a national entity that they could call their own. Their lifestyle was originally nomadic and was based on the herding of sheep flocks, but the enforcement of national boundaries, particularly after World War I, impeded this activity and as a result forced most of the Kurds to abandon their traditional ways and to migrate and relocate abroad. Once again a place that has been lost or is otherwise lacking appears as the main reason for creating a virtual locality. AKA Kurdistan is described as "a borderless space, which provides the opportunity to build a collective memory with a people who have no national archive", a "living archive" intended to bring together the "scattered fragments from around the world". This time the place-metaphor is invoked to justify the creation of a repository of pictures and narratives, this time acting as a meeting point for a people forced to exile.

The site support three main functions:

Figure 8: Main option menu in AKA Kurdistan

1. EXPLORE allows the user to navigate the virtual repository of stories and pictures of Kurdistan. The site's main screen is divided in two sections: a story map and a timeline, providing multiple ways of access to the stories that belong to the archive. The story map is a plain map of the region called Kurdistan, allows users to access stories through the geographical locations in which they took place. The timeline allows access to stories through time.

2. IDENTIFY takes the user to the "unknown images archive", where the user can help reconstruct the past by identifying anonymous people that appear in pictures from the region that were sent in by site visitors.

3. ADD allows the user to contribute to the archive by submitting photographs and their matching narratives. Upon doing so the user is presented with a number of questions.
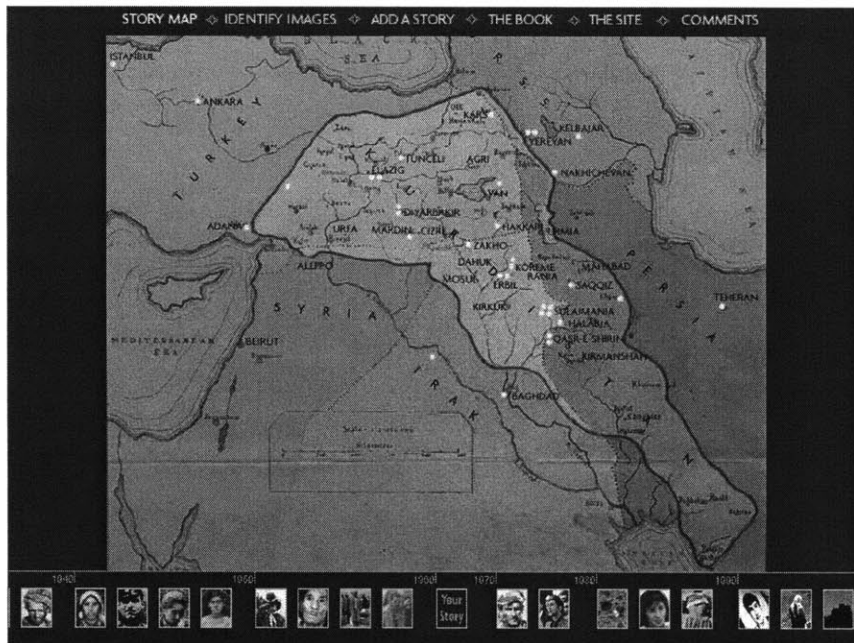
Figure 9: AKA Kurdistan's main screen displaying map and timeline. Yellow dots in the map and pictures in the horizontal timeline (below the map) are clickable links to stories.

Around 1955—I don't know precisely when—I was born into a family of eight children in **a small village in the province of Tunceli.** For practical reasons I never went to school: the **closest school was a two hour walk** from my home, and in winter it was completely unreachable. Therefore I never learned Turkish, and **spoke only Zazaki.**

After my marriage, I moved in with my in-laws. **and only telephone** in the village was e to us. In the course of time we bought **a sma** in Nazimiye. Because we had a hotel and were of the telephone, **the police kept a ver eye on us.** Rumors began to go around tha were giving aid to Kurdish freedom fighters. O was put under so much pressure that **in 198 husband fled to The Netherlands.** son was forced to move to the big city and I re behind, without a husband, with my seven othe

Those were very rough times. **I was very, uncertain and worried about the**

Ilisu-Dallibahçe (Tunceli), around 1978

Figure 10: Viewing a story associated with the region of Tunceli
after following a link on AKA Kurdistan's Map

Please answer as many of the following questions as you can when sending us your images:

Who took the photograph?

Do you remember when it was taken?

Was it related to an important event?

Who is in the photo? (left to right)

What has become of the people in the photo?

What has become of the place where the photo was taken?

How did the photograph survive? Who kept it? Who passed it on to you?

Any additional information you would like to provide?

You can submit your story in two ways:
Online or by **Email**

Figure 11: Questions asked of users submitting their pictures
to the AKA Kurdistan archives.

6.2.2 Discussion

The interactivity of the site is limited. The lack of a registration and authentication procedure means just about any visitor to the site can submit a story.

The IDENTIFY function of the site has no moderation whatsoever and any contribution is automatically appended to the page in question. The results of this are those to be expected in a forum that lacks moderation:

Who is in the Photo: saddaams father

Who took the photo: probably saddam husain

The history of the image: he was a sad and lonely man...spent lots of time with his son

Where the photo was taken: somewhere in egypt

When the photo was taken: around 1930s

As far as the ADD function is concerned, the contributing process through which users upload their photographs and stories is at best rudimentary.
In spite of the system asking a total of eight questions, no separate fields are provided, and no validation attempt is made to confirm that each question has even received an answer.

User responses evidently undergo a manual editorial process, through which people, time and location indexes are extracted. Pictures and stories are manually created and linked to AKAKurdistan's timeline and map interfaces by the site maintainers.
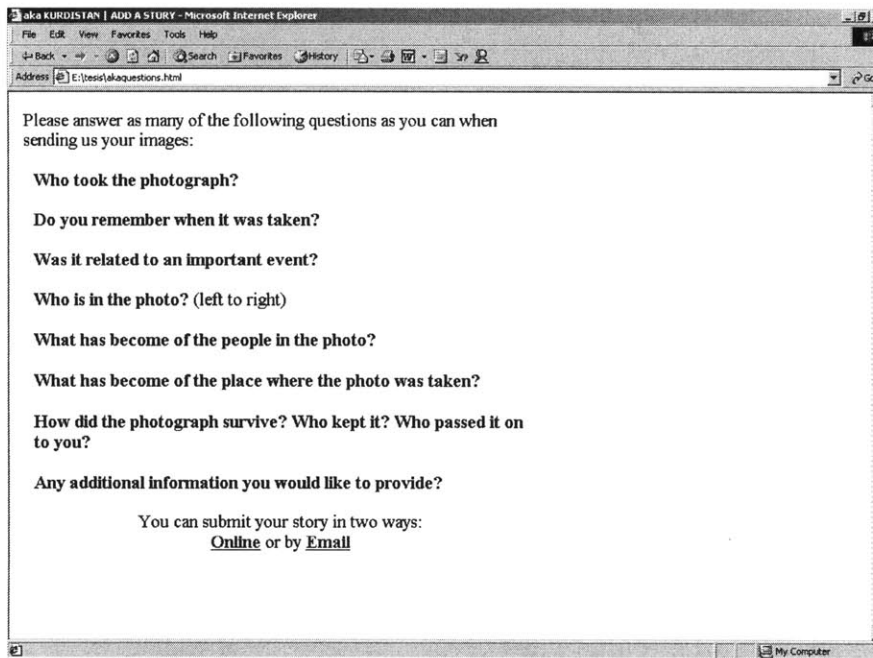
6.2.3 Conclusions

AKA Kurdistan is an interesting web site, but it does not constitute an on-line community. Contributors have no way of communicating each other and have no chance to interact beyond the actual stories and pictures that are posted. They also have no control over the materials they submit; in order to modify or retract a story one would have to request the site
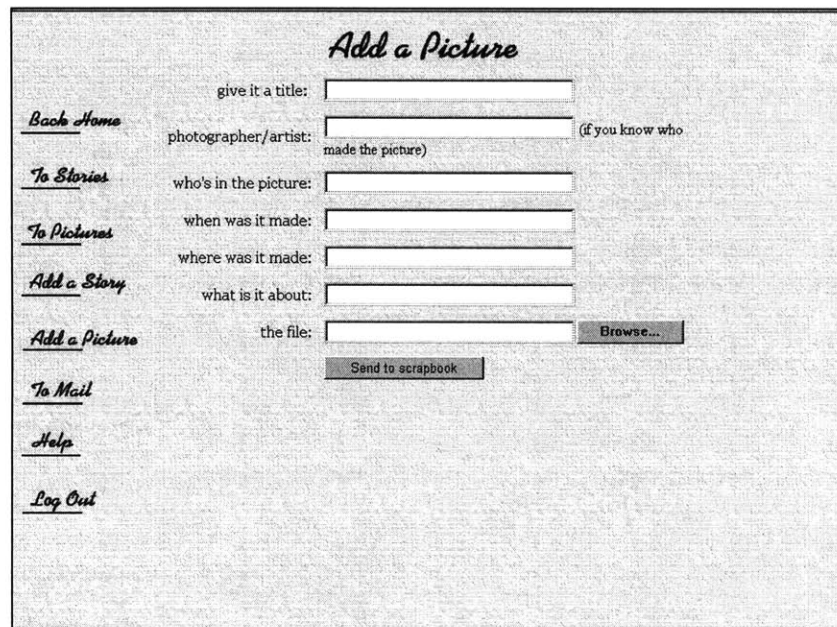
maintainers to do so, and then it would probably be up to their good judgement to do so or not.

However tenuous its infrastructure, the important lesson to be gained from AKA Kurdistan is that it attempts to index pictures and the stories associated with them according to who appears in them (participants), when the photo was taken (time), and where it was taken (location), and that it then provides access to these pictures through these last two indexes through its timeline and map interfaces.

6.3 Community Memory

6.3.1 Description

Community Memory was Ingeborg Endter's masters thesis project at the MIT Media Laboratory [Endter 2000]. The project emphasizes the building and reinforcement of community relationships through an interactive, collaborative environment that allows users to contribute photographs and narratives associated with them, and a mailing list that allows in-group communication.

Figure 12: Adding a picture

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The metaphor used in the collaborative environment is that of an electronic scrapbook. The goal is to allow a community to enrich and enliven the links among its members by working together on the remembrance of a common past. Community Memory's interface emphasizes simplicity and ease of use. The building blocks of the scrapbook are pictures (images) and stories. Materials contributed by the user or others can be annotated by entering textual notes.
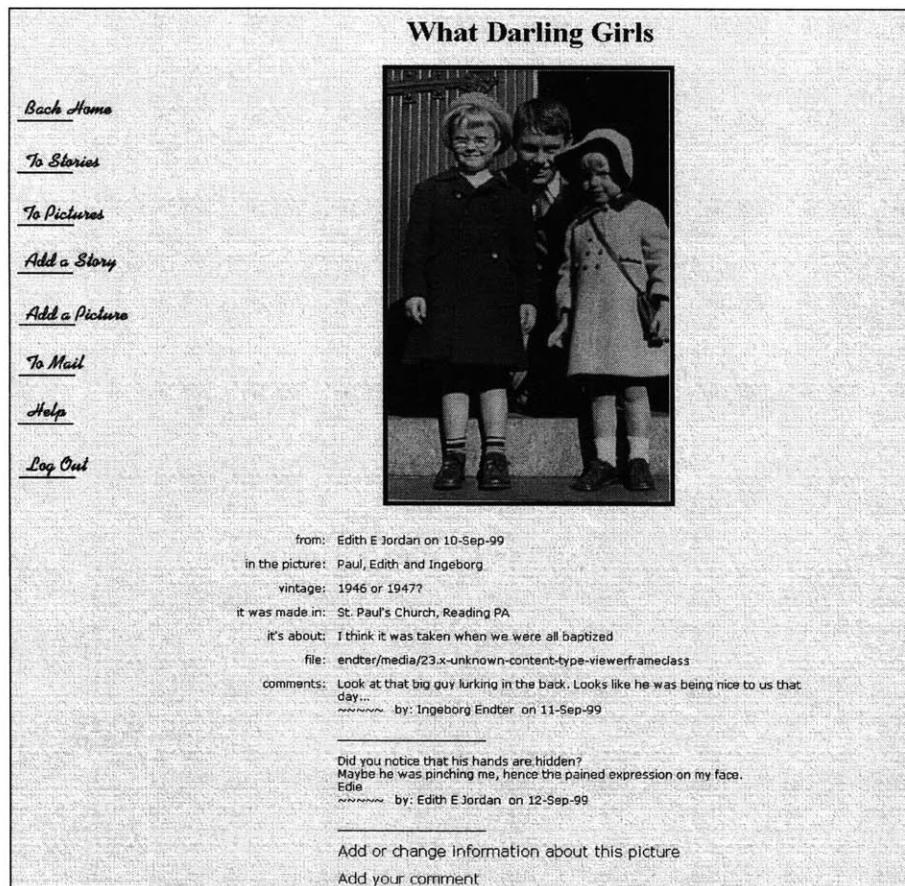
**Figure 13: A complete Community Memory page
showing picture, annotation and comments.**

The obvious advantage when comparing Community Memory to a real-life scrapbook is that the contents of this virtual repository can be shared by many; as with any material uploaded to the internet, photographs and stories present in the system can be viewed by all users regardless of their actual geographical location.

As opposed to systems reviewed above, access privileges in Community Memory are strongly enforced and only users that belong to a specific community can visualize materials and participate actively in annotating them and making further contributions. Every time a user submits a picture or a story, the uploaded materials are stamped with the name of the user that submitted it. As noted by Amy Jo Kim, establishing permanent user identities is conducive to community relations. Whereas most users will likely have no qualms about discussing recipes or gardening with strangers, the telling of stories about a shared past can evoke rich feelings and emotions which demands a supporting atmosphere of intimacy and trust. This trust can only be achieved through user identities that are stable and reliable. That way, users feel can reassured about every community member being liable for his postings and actions on-line: "Without accountability, you can't build trust, which is the foundation of any robust and healthy community" [Kim 2000 : 82]
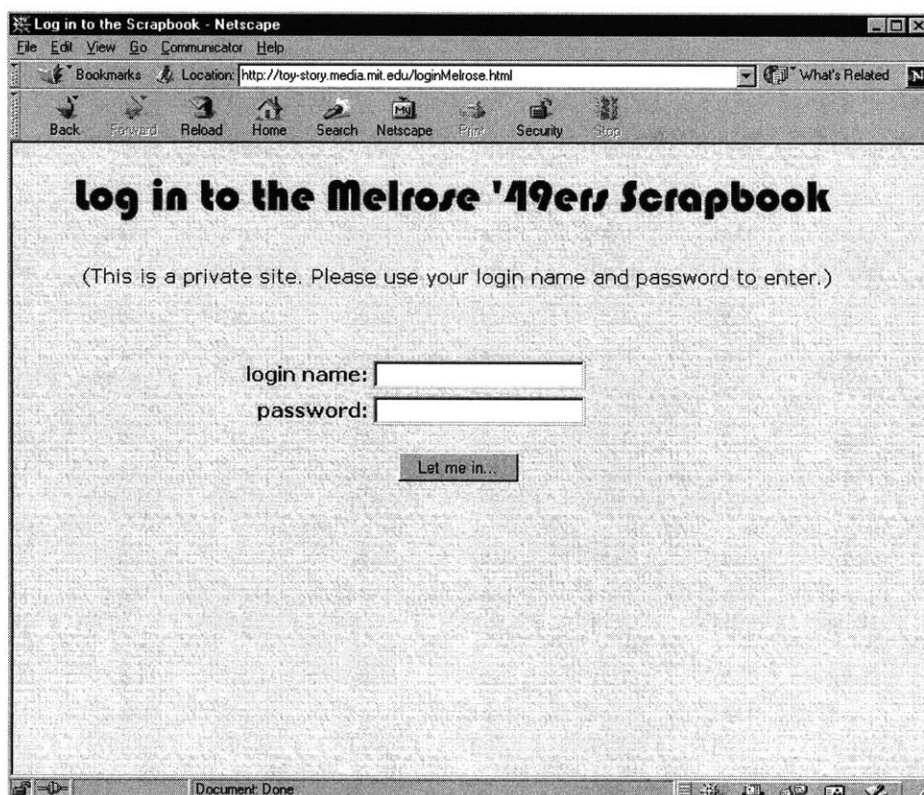
Figure 14: Privacy and identity enforced - logging in to the Melrose '49ers community in Ingeborg Endter's Community Memory

This is supported by an effective infrastructure based on a Java Web Server connected to a database engine. Community Memory's pages are dynamically generated and its content displayed according to the user's desires and the state of the system. A browsing page allows users to see the whole content of the electronic scrapbook; stories and pictures are listed with the following fields: title, name of submitter, date submitted and date of latest comment added to that specific post.

6.3.2 Discussion

As opposed to other systems reviewed above, Community memory constitutes a true on-line community. Unlike any of the previous systems reviewed above, it provides a public gathering place, strongly enforces personal identity and allows users to get better acquainted with each other over time.

User responses to Endter's post-use questionnaire demonstrate that her project was highly successful at restoring human connections, bestowing the benefits of community and intimacy to test-run participants:

It made us less strangers with more in common. Community impressions changed because you felt more comfortable and you had 'broken the ice.'

For an unfortunate person like me who could not attend the Reunion and being so far away half way around the world, you really have made the distance only seconds away and made me feel like I was among many of my friends again.

Reading all the messages from classmates brought back a lot of memories... It made me realize that a lot of folks had the same feelings and concerns that I had so the whole line of communication opened up was very beneficial.

(User responses cited by [Endter 2000: 63])

Community Memory's interface is simple and easy to use and the scrapbook metaphor upon which it is based is quite appropriate: photographs are considered more useful than most other media, including video recordings in eliciting memories and stories [Chalfen 1998]. Old photographs are true links to the past, and as a matter of fact, many people

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consider their scrapbooks to be among their most valuable properties [Lowenthal 1985 : 43].

6.3.3 Conclusions

Out of all the systems reviewed, Community Memory is the only one to support a true on-line community. As such it is a useful and interesting system.

- Community enforces persistent identities and automatic annotation of materials with authorship data, allowing and supporting the emergence of bonds of community among participants.

- Its mailing list works as a grapevine for sharing information about members, a public plaza for communication and discussion. Private messaging is contemplated in the future work section, but the possibility of continuing mailing list conversation via e-mail is of course readily available.

- Its interface is based on the idea that contributed pictures can be annotated with stories, and these can in turn be commented upon by other users. The possibility of extending this ability to permit linking different kinds of objects is contemplated by the author in Chapter 6 of her thesis [Endter 2000 : 67].

- The simplicity and intuitiveness of the scrapbook metaphor keeps the community's tools simple and easy to use. All in all Community Memory constitutes an elegant and highly successful first step at building a community for community and family history.

6.4 Memories

6.4.1 Description

Memories, a software product by Senior Software systems, provides the functionality of a questionnaire plus a writing pad on a computer. It features over 1200 questions and a framework for organizing the user's responses into a book. It is a strictly off-line system, running on a single

CPU under Microsoft Windows and without any features for uploading stories or otherwise connecting to the internet.

Memories organizes autobiographical writing following a book format. Chapters are organized around major periods in the user's life, from childhood to retirement.
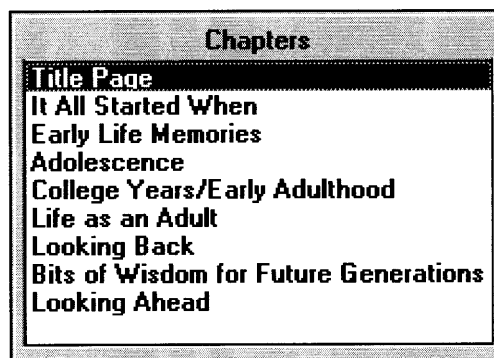
Figure 15: Chapters in life in Senior System's Memories

Each chapter is divided into topic areas that bring a different aspect of the user's life into focus: learning, work, friends and relationships, pets and hobbies, and a long etcetera.

The interaction resembles an interview in that it is based on a question/answer format. Even though Memories does not understand - and indeed, does not even attempt to parse or process - the user's replies in any way, the interface still imitates the role of an interviewer, with the user typing his replies, which are stored for later editing and processing, in the text-screen below

Chapters and topics are properly introduced, with the system trying to establish rapport and transmit a positive and confident mood. The system announces the topic at the beginning of each chapter:
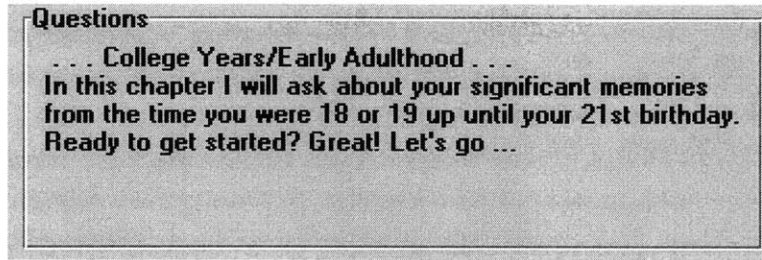
Figure 16: Introducing a topic in Senior System's Memories

And then proceeds to present the user for the questions belonging to the selected topic:

> **Did you go to college? If you did, what was the name of the college, and where was it located?**

> **Is there anything significant about how you travelled to and came home from college?**

> **How about the buildings at this college? ... any that were unusual or of special significance because of something that happened in or close to that building? (I'll ask later about your dorm/where you lived during this time...)**

> **Did you graduate from this college? When? What degree did you receive? (In the section on "Book learning", I'll ask about grade point, scholastic honors, etc.)**

6.4.2 Discussion

Carrying out interviews about a topic as broad as life requires computational power and common sense knowledge, which lie beyond the abilities of modern computer technology. Having realized this, the creators of Memories have settled for a simplification of the interview interaction.

To begin with, *Memories* gives up any attempt at observing or analyzing the interviewer's actions during the interview. The system then allows the user to signal he or she is ready for the next question or topic by pressing a button labeled "Next". No attempt at parsing is made. Memories never pays any attention to what the user has written. When the user signals he

or she is done with a certain question, *Memories* reacts by immediately proceeding to the next question. The responsibilities of responding the questions posed by the system, and doing so in appropriate form and length, lie solely with the user. In other words *Memories* makes no effort at verifying that the user is following the maxims of **cooperation, relevance** and **quality**.

This is explained by the fact that, unlike traditional interviews, which are mostly carried out at the behest and interest of the interviewer, the exchanges that take place in *Memories* occur and are carried out in the interest of the interviewee. Because of this, during exchanges *Memories* cedes, at least in part, the lead of the conversation. Instead of directing it, Memories waits for the user to select a topic, and maintains the lead of the conversation within that topic. That is, the responsibility of maintaining the maxim of **direction** is shared by the interviewer and the interviewee.

What *Memories'* interface is in effect doing is actually enforcing an extreme domain restriction. Acknowledging that maintaining a conversation in an open domain is beyond the abilities of current computer systems, Memories divides the exchange into discrete sections (topics) within which **sequence** and **coherence** can be maintained without making even the slightest effort at understanding what the user is saying. When the questions for a specific run out, the token of leading the exchange returns to the user.

To summarize, memories provides excellent support for autobiographical writing. By sharing and shifting many of the responsibilities of a conversation to the user, *Memories* succeeds at creating an interview-like situation using very limited abilities.

6.4.3 Conclusions

Memories works in isolation and thus its users cannot even aspire to be called a community. However, it is useful to think how powerful a tool an on-line interview system could be, especially if it attempted to process and extract common patterns from stories entered by different members of the same group.

Memories succeeds at creating an interview-like situation using very limited abilities. It is amazing how much it can achieve by enforcing just

one of the interview maxims, and this only by implementing domain restriction techniques. One could in fact argue that *Memories* is nothing but a series of carefully crafted question-packets. That it can maintain the illusion of an exchange and become such a useful tool despite its shortcomings only goes to highlight the importance of topical questionnaires in interview exchanges.

6.5 LifeStories

6.5.1 Description

LifeStories, by Talicor, is a non-competitive board game for whose declared goal is to build bridges between the generations and bring family and friends together by mutual storytelling. According to its creators:

> LifeStories *is an easy and fun way to get several generations talking and laughing together. Playing the game encourages young and old to tell about past experiences, present influences and future plans.*

Figure 17: LifeStories, a boardgame for family storytelling

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Gameplay is very simple: players move along the game path by throwing the dice and choosing cards from one of the four decks labeled according to the symbol their pawn has landed on. Each of the four decks contains cards which consist of nothing but questions, grouped along the following categories: **Memories** (Tell about an incident you recall from childhood; Describe something that you and your father did together), **Valuables** (Who is your favorite rock star? What is your favorite food?), **Etchings** (Tell about a dream you have remembered. Describe something that made your mother happy) and finally **Alternatives**, the deck to which players can resort if they don't like the card they got (Without using your hands, explain how to tie a shoe. Tell one of your favorite jokes).

Players must read the question aloud and respond by telling a relevant story to other players. There are no winners and no losers: the game only ends when all players have reached the Grand Celebration space at the center of the board.
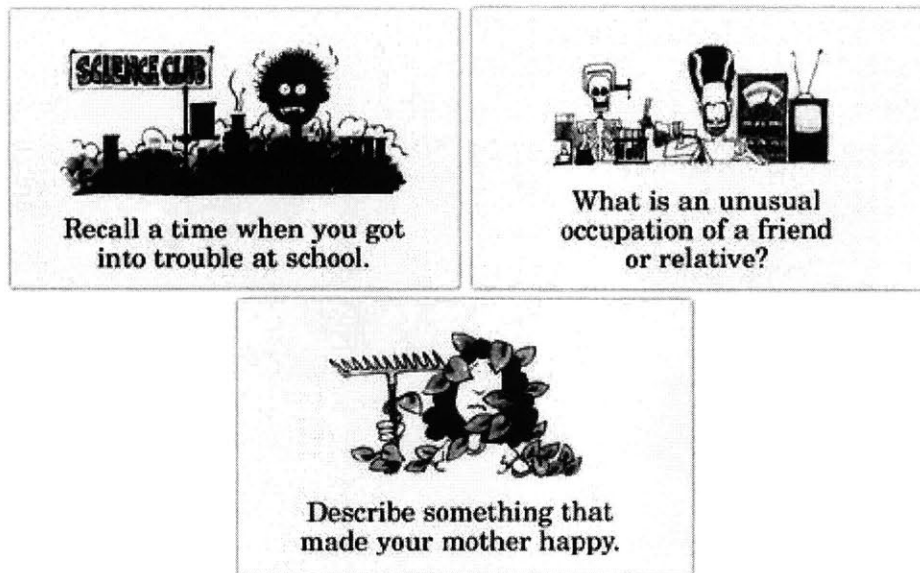
Figure 18: Sample question cards from the boardgame LifeStories

At first sight *LifeStories* seems to suffer from excessive simplicity. But market reaction says otherwise. *LifeStories* is one of Talicor's most popular titles. The game gained wide press coverage and has also received a number of important industry awards.

6.5.2 Discussion

The contents of the *LifeStories* boardgame box are the following:

- Gameboard
- Eight Game Markers
- One Dice
- Four Decks of *LifeStories* Question Cards

That such a frugal recipe could receive such awards and become a success must inevitably make us wonder. What is it that has made this boardgame so popular?

The answers to this question can be found in Chapter 2 of this thesis (see especially 2.2.3). The benefits of family storytelling are as huge as the existing unsatisfied demand for its resurgence. *LifeStories* is advertised as "An entertaining way to learn more about each other". As such, *LifeStories* bestows upon its players all the benefits of family stories: identity, continuity, guidance, enrichment and community. As stated in 4.3.2, few activities exist that could possibly be more conducive to mutual acquaintance than personal storytelling and talking about a shared past. A board game, a dice and four decks of cards may seem like trivial infrastructure, but the social and conversational space that they help to create has the power to reinforce family ties, rekindle feelings community and bridge generational gaps.

6.5.3 Conclusions

- The market reaction to this game confirms that, as established in need for the resumption of family storytelling, as an institution is not only real, but also extremely strong.

- Even the most primitive framework seems to suffice in order to create and induced context for family storytelling. This may be due to the intensity of the unsatisfied need, or simply due to the autonomous nature of family storytelling, once it has been initiated.

- The fact that the most salient feature of *LifeStories* that serves to create this induced context are question cards can only reaffirm the importance of the user of questionnaires in story elicitation.

7 COMMUNITY DESIGN GUIDELINES

Previous chapters have provided the necessary theoretical basis for understanding and examining existing storytelling and genealogy systems. The next three chapters use this knowledge to establish concrete guidelines for the implementation of an on-line community focusing on genealogy and family stories.

7.1 Audience and boundaries: two possible models

It is quite obvious that the audience of the community we intend to design are the members of an extended family. Critical to the design of such a community are the barriers of entry, namely, who becomes a member of the community and what the registration procedure should be like.

The main issue to decide upon is which people qualify to be a member and who don't. "Extended family" is an elastic concept with no clear boundaries. If I start an on-line community for the Hadis family, and my aunt Helen wants to include her third-cousin in-law, should she be allowed to do so?

There are two main ways of facing this issue:

Open boundaries

Kinship ties are never ending, and each branch in a family tree is bound to sprout new branches and leaves. Seen from a distance, family trees are indeed part of a never-ending forest. But family trees are never visualized that way; rather, they should be looked at from the perspective of each member. In other words, whereas the boundaries of an extended family are blurry, each single member of such family has a more or less clear idea of where those boundaries lie.

An implementation that takes into account the fact that boundaries are relative to each family member requires a more complex approach that will be open and closed at the same time. In more specific terms, it should allow any relative to become a member, but access to contributed materials

and submission privileges should be restricted to a line of kin, using a distance-like function able to provide a coefficient of relatedness between the user and each relative.

Distance among two relatives is always calculated by tracing their lineage back to their earliest common ancestors. The degree of relatedness between two family members can thus be easily measured by counting the number of hops up the family tree required to find their earliest common ancestor (with the proviso that one of the two relatives in question can be the in the direct line of ancestors of the other one – in that case, the distance should be considered to be zero).

In order to ensure that stories are only shared among relatives within a certain distance of kin, a rule can be implemented forbidding users from accessing stories whose protagonists lie outside a maximum kinship distance. When a user requests to see a story, the system can run a check over the narrative's participants. Only when one or more of the people mentioned in the narrative in question lie within an acceptable kinship distance, will the user be able to access it.

A threshold of 1 for the distance function will allow stories to be shared within a nuclear family; a threshold of 2 will allow stories to be shared among grandparents, parents, grandchildren and cousins; a threshold of 3 will extend the criteria to great-grandparents, grandparents, parents, children, brothers, cousins, and second cousins. The same sphere of influence will propagate up the ancestor tree of the user.

Under this model, each and every member should be allowed to invite further family members to join the community. Instead of boundaries, this model maintains access privileges through the kinship distance function mentioned above. For an exhaustive discussion of family relationships and viable computer representations see [Fischer 1999].

Closed boundaries

This model is more restrictive but much easier to implement than the previous one. It is, in fact, the one upon which Ingeborg Endter's Community Memory project is based.

Setting arbitrary boundaries on a population as porous as an extended family may seem unadvisable. However, the fact is that 1) active participants in a family project are likely to be only a fraction of the total number of members of an extended family group and 2) contact among extended kin quickly dissolves as the degree of relationship increases. The length of the human life-span and the relatively low number of siblings that each person can have severely limit the theoretical construct of an extended kin group in both the horizontal and vertical axis to at most two or three generations, with the group boundary placed squarely with the second cousins of the last generation. Therefore setting up closed communities for each extended kin is often a valid simplification of the above model.

A closed model has a number of advantages. A community with closed boundaries

- Encourages feelings of belonging. Identity is always defined in terms of belonging to a certain group. Defined boundaries allow users to develop a sense of belonging.

- Fosters community. Having a definite membership size and keeping it down to manageable numbers helps users to get to know each other better.

- Is more maintainable, especially in terms of the structured information that users must contribute to facilitate parsing of stories asdescribed in Chapter 8.

7.2 Gathering places

As has been established in Chapter 4, providing gathering places is essential to community building. The following sections discuss the usefulness of the tools and technologies mentioned in 4.2 within the framework of an on-line community for family storytelling.

7.2.1 Mailing lists

Mailing lists are the easiest community building tool to create, maintain and participate in [Kim 2000 : 30]. Mailing lists can arise spontaneously, with one person sending a mass e-mail to his or her friends and each recipient using *reply all* in turn; or they can be based on special list-administrator software, such as *Majordomo*, *Listserv*, or their usenet counterpart, *news*. In any case, mailing lists can become powerful tools for communication, and as a matter of fact many on-line communities exist which are based on nothing but e-mail lists. As discussed in 4.2 however, e-mail lists are extremely restricted in their use and application, lacking all of the three place-qualities discussed in that same section.

A mailing list can be useful in a community for family storytelling for:

- **Acting as an open, public grapevine for generic discussions**: Mailing lists can support informal communications and discussions of topic that fall outside the main purpose of the community.

- **Making announcements and spurring members to contribute.** Mailing lists are mass-communications tools. Because of this, they are a powerful avenue for leaders to communicate with all members and encourage them to contribute and participate in the community. For this same reason, mailing lists are ideal for posting newsletters and announcements encouraging users to visit the site.

7.2.2 Message Boards

Message boards are similar to mailing lists, but they qualify as true virtual places as they fulfill all three place qualities described in 4.2. They are *persistent* and record the evolving *history* of a conversation. Moreover, they are usually implemented as dynamic web pages that are part of a community web site, thus providing a limited form of accessibility and adding to the discussion a basic *sense of place*.

Message boards are often used in on-line communities to support topical conversational threads. In a family storytelling community, however, there is no need for discussion threads *per se*. Given the specific nature of the dialogue being carried out by participating members, what users of a family storytelling community will be sharing through dynamic web pages are *stories*.

The two main uses of message boards in such a community will be:

- Contributing a story.

- Annotating pictures or other kinds of non-textual material.

- Adding comments or thoughts to a story or non-textual material contributed by a different community member.

7.2.3 Chat Rooms

In contrast to message boards, chat rooms provide immediate communication among community members, and the sense of immediacy and presence provide the ultimate level of accessibility.

Because of this chat rooms are useful virtual places for community members to meet, relax, engage in idle chat and generally hang around without any specific purpose. Providing informal gathering places to meet allows people to socialize and get to know about facets of members that do not necessarily overlap with the main focus or activities of the community, the way lunches and other informal activities are always included in topical conferences and congresses so that people can unwind and get to know each other better.

7.2.4 Instant Messaging

Whereas chat rooms allow one to voice one's opinion in the virtual presence of as many community members are logged on to the room at a particular point in time, instant messaging allows instant communication with specific community members in private. This is not only an interesting addition: Whereas communities are indeed aggregations of people, the links that hold it together are the relationships that its members maintain with each other. People often find it easier to communicate with one or a few people than to voice their opinion in front of the whole group.

As a matter of fact, one of the problems faced by participants of the Community Memory project was that communication among members

was mostly public. This made some of them hesitant to communicate at all. In the words of Melrose group participant:

> *We are gregarious but afraid of embarrassing ourselves in public. It takes time, it takes nerve, it takes thought to commit to a group [Endter 2000 : 65]*

Allowing one-to-one communications and providing private gathering places are thus necessary and beneficial features for solidifying the bonds of community among members. The sense of immediacy and presence that chat rooms and instant messaging afford can become a powerful inducement for users to return once and again to the community.

7.3 Privacy and Identity

7.3.1 Access privileges

As is the case with Community Memory, each family's on-line community should constitute a self-contained environment closed to outsiders. Relatives become members of the community as they are invited by a member and approved by the community leader.

The personal and sensitive nature of family stories that make them valuable and conducive to intimacy means that they mandate the highest levels of privacy and security. Non-members should have no access to communities whatsoever. The atmosphere of trust that a family storytelling encourages would be severely disrupted if strangers were able to read the contributions of communities that they don't belong to. Needless to say, strangers should also have no contributing privileges whatsoever.

Allowing non-members to get a flavor of the environment remains an important goal, however. In order to satisfy the curiosity of visitors and potential members, a mock family tree should be set up.

7.3.2 Profiles and user activity

Profiles are important within communities because they give an idea of the interests and motivations of other members. Profiles act as an identification badge that lets other members learn more about a certain person. The simplest community profiles consist of basic personal data: name, gender, age, and e-mail. Communities like Yahoo! allow users to enter a tag line and favorite web on-line web page; ICQ allows users to go into more detail and specify their hobbies and topics of interest, AOL permits the creation of a home page detailing hobbies, occupations and favorite activities. Apart for the information that users provide about themselves, profiles can also show a log of a member's recent activities.

In most communities, having rich, complex profiles is an advantage. Within a community based on genealogy and family history, however, providing ample space for telling about oneself in a profile section may actually be detrimental. A crucial difference between most communities and the one that we're interested in building is that the topic of discussion are the members themselves and the common past that they share. In a community focused on water sports and surfing, a member's age or marital status may never come up in the conversation, and in most cases this won't even be relevant. But in a family storytelling community, the topic of discussion is precisely the kind of information that would end up tucked away in a profile in most other community environments. Community member' s personalities and life stories are the essence of the community that we're trying to design, and for this reason they should be at the spotlight of the discussions and exchanges among its members. For this reason, it is better to allow explicit profile information at a basic level, while allowing personal pages to grow based on the contributions of each participant.

An interesting example of a community in which evolving personal pages act as useful referents for understanding member's activities is the *Melrose Mirror*. An electronic publication produced as part of the MIT Media Lab's Silver Stringer's project [Turpeinen 2001 : 107]. The members of this on-line community are the residents of the Milano Senior Center in Melrose, Massachusetts. As quoted by Marko Turpeinen, after four years of use, the *Melrose Mirror* archives contained 750 stories and 900 pictures. The resulting benefits of the project included personal growth, self-exploration

and an enrichment and deepening of social relationships among participants. Personal pages played a significant role in this interaction, allowing members to learn about the perspectives and preferences of others. Marko Turpeinen cites an anonymous stringer as stating:

The personal page with its links to the stories gradually becomes a portrait of that person. The collection of their stories reveals their interests [Turpeinen 2001 : 149]

Evolving personal pages can thus become important tools in helping community members get to know each other better over time.

**Figure 19 Jim Driscoll's personal page. Silver Stringers'
member pages include a picture and a short biography as well
as direct links to all stories and articles contributed by each participant.**

7.4 Leadership

Even though, as we shall see in the coming pages, one of the main advantages of having an online community for family storytelling is its pluralistic, horizontal nature, there is still a requirement for especially empowered community members that can act as leaders.

Ingeborg Endter, while comparing the behavior of the two test groups in Community Memory commented:

Another feature of the Melrose group... was the fact that one person, my original contact to the reunion class, spent a lot of time and energy sending messages to the list, purring people on to share their memories. Surely the volume of stores and conversations that this group shared would not have been as great without his participation [Endter 2000 : 66]

The main functions of a community leader are:

1. Spur other members to participate
2. Resolve potential disputes
3. Enforce a code of conduct

In the case of a closed-boundaries community model, the community leader will also be responsible for uploading initial, basic information about participants and locations. Whereas building the family tree itself can be part of the tasks of the community, it is important that each new member correspond to a record in the family tree representation. The leader should be responsible for creating the first person records in the system that will allow the corresponding family members to join.

7.5 Cyclic events

Every long-lasting community is brought together by regular events: family dinners, weekly card games, monthly club meetings, annual celebrations. These gatherings help define the community, and they remind people of what they have in common and what their community is all about [Kim 2000 : 233].

Holding cyclic events gives members a sense of belonging and reinvigorates the purpose of a community.

Communities based on groups of people who don't necessarily know each other may need to resort to far-fetched excuses to bring members together. Families, however, are already communities to begin with, and as such they have developed enough cyclic events – birthdays, anniversaries, religious holidays and other special occasions - that celebrating them on-line can keep the community busy for prolonged periods of time.

These special events can be celebrated on-line in two ways:

1. By organizing on-line meetings. Relatives who are geographically distant can come together in a chat room and schmooze the way they would in a real-life birthday party.

2. By organizing storytelling activities around the person or event being celebrated or remembered. A number of days before a member's birthday, for example, that person can be showcased on the community website, and other members can be asked to contribute their memories involving that person, and even possibly of previous birthdays in the past. Wedding, graduation and other anniversary are equally fun and useful in bringing community members together to reminisce and celebrate by contributing their memories, stories, pictures and other related multimedia materials.

Mailing lists are very useful for reminding people about these special occasions. Whereas showcasing a person on the community's website is usually quite effective, this mandates that the person visit the site on the first place. Mass e-mailings to group members about upcoming events can be useful to make members who have strayed to come back and join the celebrations.

7.6 Roles

Roles in a family history community will mimic those that family members would assume in a traditional, real-life storytelling setting. Older members of a community will have a bigger volume of memories to contribute, whereas younger members will likely play the role of interviewers and bring in their curiosity:

> *The young get a little bit of wisdom, a little bit of knowledge from the old, and the old get a bit of vigor, a lit of youthfulness from the young*
> *[Zeitlin et al 1982: XIV]*

According to [Smith-Barusch and Steen, 1996]

- Elders family members have *seen* the past with their own eyes and can thus serve as witnesses to history, serving younger generations with their memories and transmitting the values of a culture.

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- Grandparents can serve as conduits of cultural identity, transmitting the meaning and importance of distinct traditions to succeeding generations.

- When asked, grandparents themselves often identify their role as an opportunity to link the past and the future.

An on-line community can thus go a long way towards restoring the role of elders as mentors and role models, living connections with the past and the future.

8 REPRESENTATION, PROCESSING AND ANNOTATION

8.1 Representation

A key feature not present in all of the storytelling systems reviewed in the previous chapter is *representation* of family information. The reasons for this lack are various and can in most cases be justified: Grammy Mirk displays implicit rudiments of representation in its design, but it is manually crafted; Community Memory, while appropriate for family storytelling, is targeted to generic communities of which families constitute only a subset, and thus has no built-in ability to model them.

As is always the case with knowledge representation, having a model for the information to be processed stored and retrieved, can greatly increase its accessibility and usability. The storage and navigation of stories and pictures can thus be vastly enriched by even a very limited representation of their contents.

Both oral historians and cognitive psychologists consider **participants**, **time**, and **location** to be the main cues for eliciting and retrieving narratives about the past. Whereas authors disagree as to the relative effectiveness of each of the three in eliciting memories, these three keys are consistently considered to be among the main indexes for accessing autobiographical memory ([Barsalou 1988], [Conway 1990], [Linton 1994] [Sypher, Hummert and Williams 1994]). It should thus come as no surprise that these three indexes coincide with the preliminary research requirements for carrying out an oral history interview [Epstein and Lewitt 1994], as outlined in 5.2.1.

What is indeed surprising is that in spite of almost unanimous agreement as to the important of these three keys for indexing memories and stories, no existing genealogy or family history system takes this consensus into account in the design of its interface, navigation or indexing structure.

The following sections describe possible representations that would greatly expand the ability of a system to organize, navigate and access stories entered by users.

8.1.1 Representing people

8.1.1.1 The GEDCOM Format

Having a representation of family members and their relationships would enable a system for family storytelling to organize stories by teller and protagonists.

Relationships among kin lend themselves easily to representations, and as a matter of fact are often used as examples in textbooks for declarative programming languages (see for example, [Bratko 1986]). The standard format for storing, transmitting and representing this information is called GEDCOM, an acronym for *Genealogical Data Communications*. This format was developed by the Family History Department of the Church of Latter-day Saints (LDS Church) in order to provide genealogists with a flexible and uniform format for data exchange. Its purpose is to facilitate the sharing of genealogical information among different products and platforms, and to foster the exchange of genealogical information among historians, genealogists and other researchers. The current release of the GEDCOM specification as of this writing is 5.5 released on January 2nd, 1996.

The following paragraphs provide an introduction to this specification; for more complete documentation see [LDS 1996].

The GEDCOM format has two levels of specification. The first is a general-purpose, COBOL-like record syntax able to represent any kind of structured information using a sequential character stream. The second level of the GEDCOM specification is syntactic and defines the data format used to read and write GEDCOM files. This syntax can represent information about individuals as well as their kinship in very simple and straightforward fashion. For this reason GEDCOM is used as the standard interchange format for genealogical software on the market.

8.1.1.2 GEDCOM syntax

GEDCOM files contain a series of records. The beginning of a record is specified by a line with the topmost level number (0).

Records are composed of sequences of lines of variable length, terminated with a carriage return, a linefeed, or both. Lines always start with a hierarchical level number, are followed by a tag, and may end with an optional value. Lines may also point to other records using a pointer or cross-reference identifier.

GEDCOM tags play the role of database fieldnames and thus identify subsequent values or references within that line. Any given tags can occur zero or more times within a record. Tags which can not be interpreted are discarded during reads. This gives GEDCOM a high degree of flexibility: new tags can be introduced at any time without sacrificing compatibilities with earlier version. Data which is not understood at the receiving end will be dutifully ignored, and only meaningful records will be processed.

Hierarchical dependencies in GEDCOM are made explicit by using level numbers. The topmost level is zero and subordinate lines have higher level numbers. Sub-records can thus be nested within records, and this process can be repeated without any imposed limit. This hierarchical arrangement allows for clustering and encapsulation of information which reflects dependencies usually expressed through relational keys in database systems.

GEDCOM records can point to other records within the same GEDCOM file. These cross-references are made explicit by using a cross-reference pointer and a cross-reference identifier. The pointer specifies the type of record being pointed at, the identifier uniquely matches the tag value of the record being referenced. This is compared in the GEDCOM documentation, using relational database terminology, to the use of primary key references in database systems.

8.1.1.3 An example GEDCOM record

The following is an actual printout of a typical GEDCOM file. The example has been intentionally kept short for the purpose of explaining its contents.

Indentation, which does not appear in the original record, has been added to facilitate comprehension.

GEDCOM files start with a header that states the origin of the file and the system that created it.

The SOURce line specifies the system that created this GEDCOM file. The VERSion, NAME of the system, the CORPoration that created it follow. Then the ADDRess of this corporation is specified. The address line was too long and it has been broken up into two lines, hence the CONTinuation tag. Finally, the SUBM tag of this record points to the first SUBMission record

```
0 HEAD
        1 SOUR FTW
                2 VERS 8.00
                2 NAME Family Tree Maker for Windows
                2 CORP Broderbund Software, Banner Blue Division
                        3 ADDR 39500 Stevenson Pl. #204
                                4 CONT Fremont, CA 95439
                        3 PHON (510) 794-6850
        1 DEST HEIRLOOM
        1 DATE 20 AUG 2001
        1 CHAR ANSI
        1 SUBM @SUBM@
        1 FILE C:\Genealogy\famtree.GED
```

The actual data begins here:

```
0 @SUBM@ SUBM
```

Records for INDIviduals follow, providing SEX, BIRTh and DEATh information for different people in the family tree

```
0 @I01@ INDI

                1 NAME Hersch Leib /Genijovich/
                1 SEX M
                1 BIRT
                        2 DATE 15 JUN 1875
                        2 PLAC Soroki, Moldova
                1 DEAT
                        2 DATE 12 MAY 1958
                        2 PLAC Buenos Aires, Argentina
```

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```
        1 FAMS @F1@


0 @I02@ INDI
        1 NAME Minze /Faytlewich/
        1 SEX F
        1 BIRT
                2 DATE 3 JAN 1879
                2 PLAC Jampol, Ukraine
        1 DEAT
                2 DATE 22 MAR 1965
                2 PLAC Buenos Aires, Argentina
        1 FAMS @F1@

0 @I03@ INDI
        1 NAME Enrique /Genijovich/
        1 SEX M
        1 BIRT
                2 DATE 15 JUN 1903
                2 PLAC Buenos Aires, Argentina
        1 DEAT
                2 DATE 8 SEP 1964
                2 PLAC Buenos Aires, Argentina
        1 FAMC @F1@

0 @I04@ INDI
        1 NAME Samuel /Genijovich/
        1 SEX M
        1 BIRT
                2 DATE 12 FEB 1901
                2 PLAC Buenos Aires, Argentina
        1 DEAT
                2 DATE 16 MAY 1984
                2 PLAC Buenos Aires, Argentina
        1 FAMC @F1@
```

The final record of type FAM provides kinship information for the above three individuals.

Individual I01, Hersch Leib Genijovich, is the HUSBand.
Individual I02, Minze Faytlewich, is the WIFe
Individual I03, Enrique Genijovich, is a son of I01 and I02
Individual I03, Enrique Genijovich, is a son of I01 and I02

The final MARRiage line corresponds to the marriage of the two parents and provides DATE and PLACe information of their wedding.

```
0 @F1@ FAM
        1 HUSB @I01@
```

```
1 WIFE @I02@
1 CHIL @I03@
1 CHIL @I04@
1 MARR
          2 DATE 2 JAN 1897
          2 PLAC Jampol, Ukraine
```

As can be seen GEDCOM records focus on specifying PARENT-CHILD relationships. Experience and heavy practical use has demonstrated that this structure is more than sufficient for the accurate and efficient representation of family trees. More complex relationships among kin can easily be deduced by traversing the trees stored using these structures.

8.1.2 Representing time

Being one of the main keys for indexing stories, having a representation of time is of the utmost importance for a family storytelling infrastructure. There is, however, little to say about its representation, for the sole reason that it does not differ significant from the time representation that is used, for example, by the operating system to timestamp newly created or recently modified files.

There are, however, two important aspects in which genealogical time-date information differs from other forms of storing chronological data.

Genealogical time can be *incomplete.*

Operating systems would not be able to make sense of information that states that a file has been modified during one month of October within the last ten years, without knowing the year in question, nor of the fact that a folder was last modified in early September without knowing the exact day.

However, genealogists must often deal with incomplete dates, having learned for example that one's great-grandfather passed away in August sometime around 1900, or that a grand-uncle was born between 1914 and 1918 without knowing the year, much less the month or day that this birth took place.

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Genealogical time can be *relative*

Family stories frequently begin by setting a time reference "This happened when I was a kid " or "This is a story from the time when Uncle Joe had just started college".

Genealogical time can be *approximate*

Another possibility is for time references to point to the life-era that encompasses it instead of a specific event or time frame. The following division in life stages is an adaptation of the division of life into eras proposed by [Erikson 1980]:

- Childhood
- Teenage years
- Young adult
- Adult
- Mature
- Senior

As will become evident in the coming pages the division of time into eras is helpful for setting rough temporal references for both question asking and storytelling themes.

Whereas incomplete dates or life eras are useless for any internal computer processing, they must still be accounted for in the representation that this environment will use.

8.1.3 Representing places

The most advanced genealogical systems available today use gazetteers, place-name listings which associate names with coordinates. However no current genealogical system that this author knows of currently allows users to explicitly declare places hierarchically.

A hierarchical representation, in addition to reflecting natural cognitive representations of geographical space [Egenhofer and Mark 1995], also has the advantage of facilitating interaction with the system allowing for easy additions and deletions. It can also facilitate the display of information at the level of detail desired by the user.

A user contributing a story can declare that it took place in his Uncle Sam's house kitchen. Were it not for a hierarchical organization, it would be impossible to access this story using spatial indexing without referring to the exact string specifying this location. But in a hierarchy, Uncle Sam's house can be located, for example, in Los Angeles, California, United States, and thanks to this the story can be located through any of the larger geographical locations within it is nested.

Last but not least, hierarchical storage of geographical location also allows visualization in maps and other graphic media.

8.1.4 Question packets

As has been discussed in Chapters 5 and 6, the goal of eliciting stories can only be attained by establishing an appropriate interview context. The many questionnaires available in different media coincide in being ready-made, pre-arranged lists of questions. We will stick to this approach in our guidelines, but let's just mention that an interesting alternative would be to have the computer generate questions based on knowledge about human activities. Needless to say, this would require vast amounts of common sense knowledge both about social interactions and human emotions, and discussing this approach in detail lies beyond the scope of this thesis. However, an interesting survey of candidate systems with common sense knowledge about human activities can be found in [Mueller 1999].

Having decided to stick to the original approach of pre-arranged questionnaires, it is important to consider how they will be organized. The structure used by the many of the titles described in Chapter 5, which is also the one followed by the software package Memories (see 6.4) can be used as a general blueprint. Questions organized in topical packets, and organized around lifetime-eras can function as prompts when invoked by users.

As we shall see in the coming pages, extracting temporal references can prove extremely difficult. An unforeseen but advantageous consequence of having the user specify both the topic and time frame of the story that he or she wants to contribute in advance is that the resulting text can then be

indexed according to these two keys without the need for the user to annotate them explicitly.

8.2 Processing and Annotation

The above sections explain how information should be represented and stored in order to support a community for family storytelling. This section discusses how information is extracted from stories so that they can be indexed and later accessed through a navigational interface.

Stories entered in text format can be parsed. The parsing and extraction of each of these three indexes, however, differs in its level difficulty. When presented with a corpus of stories contributed by family members who share a common past, the computer faces a task similar to that of an anthropologist or folklorist trying to make sense of a number of stories obtained on-site via fieldwork.

8.2.1 Extracting people

Of each of the three indexes, names of persons are the easiest to extract from stories. Unlike spatial and temporal references, name references can be detected even in those cases in which they cannot be decoded, i.e. assigned to an existing record representing a person. Doing so, however remains a challenging task. For one, family members are not normally referred to by name surname combinations or any other unique identifiers. First names or even nicknames suffice. Terms of address, which one would expect in principle to help in identifying and disambiguating one relative from his namesakes, can often be misleading:

> *Aunt, uncle, sister, brother, and cousin are especially troublesome words since they can indicate respect, affection and brotherhood as easily as blood or marriage relationships* [Zeitlin et al 1982: 265].

In spite of this difficulty, however, out of the three indexes, that of participants remain the most liable to be parsed and extracted. Unlike places, people's names are discrete and can be readily identified as such by most parsers: in comparison with the name-space of places, which for practical purpose can be safely considered unlimited, the number of

possible proper names and even nicknames is mostly bounded within a specific culture. For this reason, extracting and identifying individuals from family stories is feasible if the system can resort to user intervention in order to learn about and identify both unpredictable nicknames and terms of address that do not reflect actual family relationships.

8.2.2 Extracting time

Sufficiently advanced systems exist that allow computers to detect and extract time information from natural language texts. Doug Koen's Time Frames project [Koen and Bender 2000] is able to extract time intervals, ages, and date/time data from news items with remarkable precision and recall performance. Temporal references in family stories, however, follow entirely different format. Instead of using absolute dates, landmarks in the group's shared past are, as a norm, used to point to time periods or specific events [Garret 1961 : 281]. This is not due to some cultural convention, but rather due to the way that memories are storied in autobiographical memory [Barsalou 1988]. As described by [Portelli 1981 : 168-170], this is a problem that is constantly faced by historians:

> *One of Edith Wharton's ghost stories begins with something like this: "the fall after I had typhoid fever..." No other date is given: the narrator must have felt that this was precise enough, and that her implicit audience... needed no more. To the immediate circle of her acquaintances, the initial formula contains all the necessary "historical" information. Not so for the author and her model readers... This is a common experience for oral historians.*

To compound the difficulty of understanding these references, while these landmarks do point to time periods, they are frequently not overtly temporal. Portelli goes on to quote the testimony of one of his informants:

> *"One more thing I remember, at Motnecastrilli, with Biancini. It was a farm with 34 laborers. On Sunday morning the overseer would come in and say; 'Say, you guys, no going to town today, we have work to do'. Can you imagine that? It was slavery, that's what it was: slavery!"*

To this informant and his audience, the name of Biancini, a farm overseer, was sufficient to narrow down the time of the story. Through that name,

continues Portelli, the narrator is "implicitly quoting a wealth of other stories and memories hared with his group" but from which he, as an outside witness, was completely excluded. Understanding such time references requires not only inside knowledge but also extensive the use of extensive common sense that computers sorely lack. If competent human historians often find themselves at loss to understand time references in personal narratives, one can only imagine the performance to be expected from computers when applied to this end. The inescapable conclusion is that family stories require manual annotation for time indexing.

8.2.3 Extracting places and geographical locations

Information extraction systems are quite effective at extracting names of towns, states or countries. Family stories however are often concerned with much smaller geographical areas and the places and locations they refer to usually have very idiosyncratic names that are private to the family and which may even vary from family member to family member. The house that aunt Maria calls "Peter's" can be "the Green House" to uncle Robert and "the Pond Place" to his grandchildren. Furthermore, discourse references to places are can be as indirect and vague as "upstairs" or "down the hill". Locations can be mentioned by using oblique references to their location with respect to other places, to their physical properties, or to events that took place in them. Even when the references are direct the place-names used can be particular to a group [Basso 1996], no longer exist [Slyomovics 1994] or be even fictive or imaginary [Haslam 1923]. Compounding the above difficulties, context in spatial discourse is critical for understanding. Even humans have trouble understanding spatial aspects of a narrative if they are not familiar with the landscape that sustains it. The reasons above are sufficient to discard place extraction in the case of family stories in favor of user annotation.

9 NAVIGATION AND INTERACTION

9.1 Navigation

At all time users should be able to use the following navigational tools be able to access stories throughout the three main keys.

9.1.1 Navigating People: the family tree

The most frequently used visual representation of family relationships is the family tree. The system should allow users to search for family members by surname, name or though a family tree interface, and to add new family members to the tree (and delete them in case of community leaders).

Plotting tidy trees that visually depict parent-child relationships is far from trivial. The first algorithm for plotting tidy trees were proposed by [Reingold and Tillford 1981]. Their algorithm however was intended for binary trees, whereas family trees need many children to descend from the same parent. An improved algorithm that deals with multiple children nodes is described in [Moen 1990]. Moen's algorithm is similar to Reingold and Tillford's, but it incorporates the use of geometrical contours to prevent nodes from overlapping with each other. To determine each node's position, Moen's algorithm traverses the whole tree and forms a polygon-shaped contour around each node. By leaving extra space around each sible child, the algorithm allows tree nodes to be as close as possible to each other without either overstepping each other's contour space.

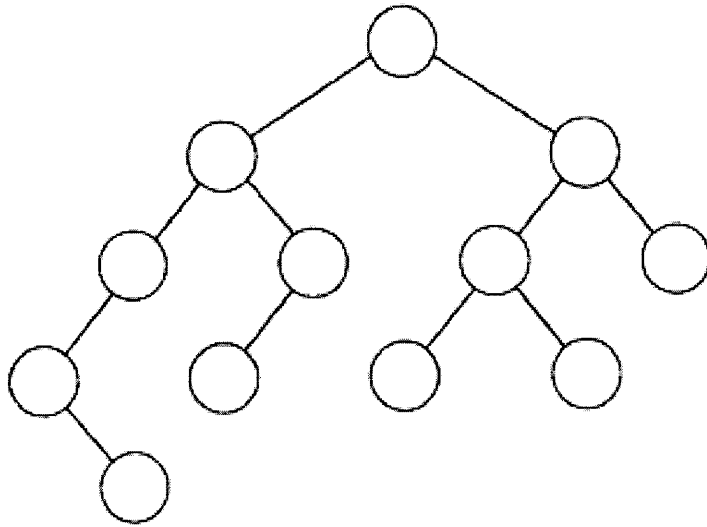**Figure 20: A tidy binary tree plotted using Reingold and Tillford's algorithm (from [Moen 1990])**
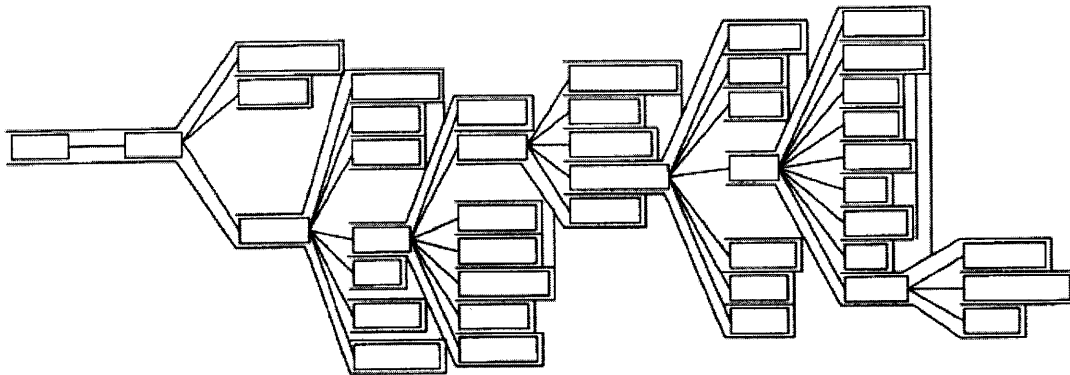

Figure 21: The contours and associated nodes of a large tree plotted using Sven Moen's algorithm (from [Moen 1990])

For a fully-commented Java implementation of Moen's contour algorithm, as well as an useful discussion on the general usefulness of trees and the properties of tree layout algorithms, see [Korman 1997].

9.1.2 Navigating time: the timeline

As discussed in Chapter 5, interviews advance along two lines: a topical axis and a temporal one. The ideal interface for organizing materials along these two axis is a timeline. According to [Allen 1995], the obvious advantages afforded by timelines are that they can:

Inform: Timelines provide basic information about the relative order and dates of events.

Show Context: Events can be compared across timelines.

Encapsulate: Events may be included as part of larger events.

Link topical aspects: Links can show that events share attributes or a hypothesized causal relationship.

The *Lifelines* system, developed by the Human Computer Interaction Lab at the University of Maryland, provides a generic visualization environment that supports the above features. In discussing the *Lifelines* architecture, its authors recognize that personal histories flow along parallel dimensions that represent the different roles and capacities which a person plays in life.

In order to be useful as a navigation tool, a timeline interface must thus be able to present these different facets to the user in a manner that facilitates visualization:

> *Each of these topical facets refers to topical aspects of a person's life. For example the medical facet of a person's history might include a 5 years story about their back pain. A famous painter's biography might include facets on painting, writing and influential personalities. His painting facets would then have different aspects such as style and themes. Aspects can include events (e.g. an operation, a police arrest) and periods (e.g. two weeks of acute pain, the blue and pink period in Picasso's biography). [Plaisant et al 1996].*

Lifelines affords a visual representation of both periods and specific events using color and format cues. Histories are lines; periods correspond to changes of size or color along these lines, and discrete events are represented by icons.

A complete analysis of the architecture and representation supporting lifelines can be found in [Plaisant et al 1998]. The topmost record in *Lifelines* is the PERSON. Associated with each PERSONs are the FACETs that constitute the main topical threads (professional, legal, educational, medical) of his or her life. Dependent from each of these FACETs are EVENTS or aggregates thereof, appropriately called AGGREGATES. Using these structures, *Lifelines* allows the representation of widely differing personal histories.
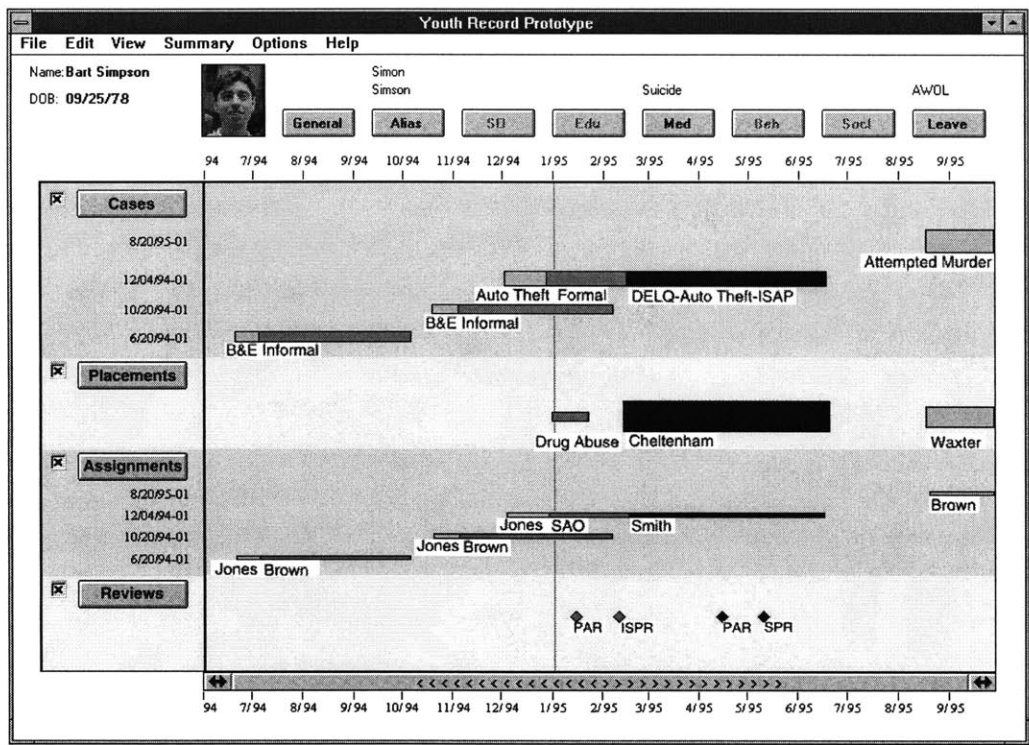

Figure 22: A typical screen depicting a life story from the *Lifelines* system

A timeline similar to Lifelines would be extremely useful in showing the temporal context of stories and events contributed by family members. This holds true both for displaying and linking to the stories concerning a single individual, as well as displaying stories for many family members.

In the latter case, community members will be able to visualize and compare temporal and topical blocks belonging to different individuals.

9.1.3 Navigating places: maps and gazetteers

Two different interfaces can be used to navigate stories that have been annotated with geographical locations.

Maps

The first and obvious choice is a map. Maps allow contextualized visualization of locations and are ideal for finding stories associated with specific geographical areas (see 6.2).

Raster maps provide scalable graphical representations of geographical locations. ESRI, the publishers of *Arcview*, probably the most popular desktop GIS and mapping software, has created an open and public data format called that supports the visualization of geographical information in different layers. Information are stored in files called shapefiles that carry the SHP extension. A full specification of this format can be found at: *http://www.esri.com/software/opengis/openpdf.html*

Geotools, an open-source Java library that allows maps to be viewed interactively fully supports the above format and allows java programs to access and display *Arcinfo* shapefiles. The source code, FAQ and other related information pertaining to the *Geotools* project can be found at: *http://geotools.sourceforge.net/*

Gazetteers

A gazetteer is a dictionary of geographic places and features whose essential attributes include a name, the type of the location (city, town, mountain, street, building, etc.) and a latitude, longitude pair (See [Hill, Frew and Zheng 1999]).

Gazetteers are useful for:

- Looking up place names, (sometimes with different spellings) and finding their designated latitude and longitude

- Locating places whose names have changed over the course of time, or have alternative nomenclatures in different languages

- Accessing, maintaining and visualizing geographical information in hierarchical fashion

The U.S. Census Bureau mantains a complete gazetteer of United States place-names. The following page provides interactive access as well as links for downloading the relevant data sources:
http://www.census.gov/cgi-bin/gazetteer/

The Getty Thesaurus, an eminently complete gazetteer of geographic names provides worldwide coverage, and its entries include historical and contextual data as well as pointers to further references. It can be found at:
http://www.getty.edu/research/tools/vocabulary/tgn/index.html

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Heidelberg, Schloss (castle)

Lat: 49 24 N	Long: 008 42 E	*(represented in degrees minutes direction)*
Lat: 49.400	Long: 8.700	*(represented in decimal degress and fractions of degrees)*

Note - Located on hill above the city of Heidelberg; was devastated by French in late 17th cen., & struck by lightning in 1764.

Hierarchical Position:

```
  ⌐ ▣ Europe.......................... (continent)

    ⌐ ▣ Deutschland.................... (nation)

      ⌐ ▣ Baden-Württemberg......... (state)

        ⌐ ▣ Karlsruhe.............................. (district (national))
Names:
    Heidelberg, Schloss (C,V)
    Heidelberg Castle (C,O)
Sources:
    Heidelberg Castle....................... Encyclopædia Britannica (1988),
    Heidelberg, Schloss..................... Rand McNally Atlas (1994), I-70
```

Figure 23: The Getty Thesaurus gazetteer entry for the Heidelberg Castle, showing latitude, longitude, hierarchical position, alternate names, historical notes and further reference sources

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Maps and gazetteers are complementary, and in fact they may be based on the same geographical database within the same system.

9.2 Interaction

These screens constitute anchors for stories that are associated with specific key values

9.2.1 Person page

A person page acts both as a personal profile and a record of the user's activities in the community, and as a point of departure for contributing stories about that person. In particular, a person page should link to:

- Stories entered by this person (both about himself and also about others)

- Stories about this person (both entered by himself and by others)

- A timeline showing stories in chronological context

- A scrapbook showing pictures in which he or she appears

- This person's user profile, if the person in question has become a member of the community

- Instant messaging service to communicate with this person on a one-to-one basis
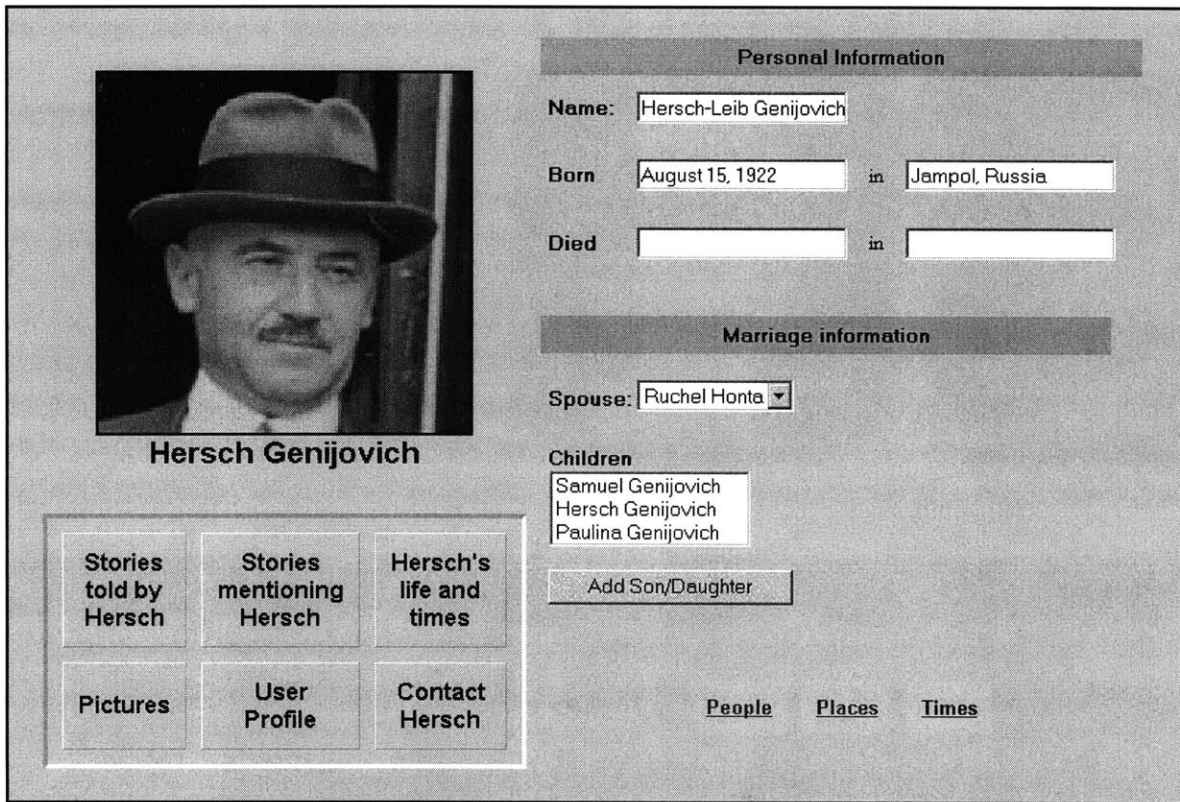
Figure 24: A mock-up person page showing portrait, genealogical data and links to stories and pictures

9.2.2 Location page

A location page should be the point of departure for stories associated with the place in question. It should have links to:

- Stories and pictures that have been annotated with this place
- The higher-level within which this location is contained
- The lower-level locations that this place in turn contains

People   Places   Times

This place is located in:

Jampol town center

And contains the following places:

- **Haim's place**
- **The old school**
- **Granma's house**

The Old Neighborhood

Stories in this location   Pictures from this location
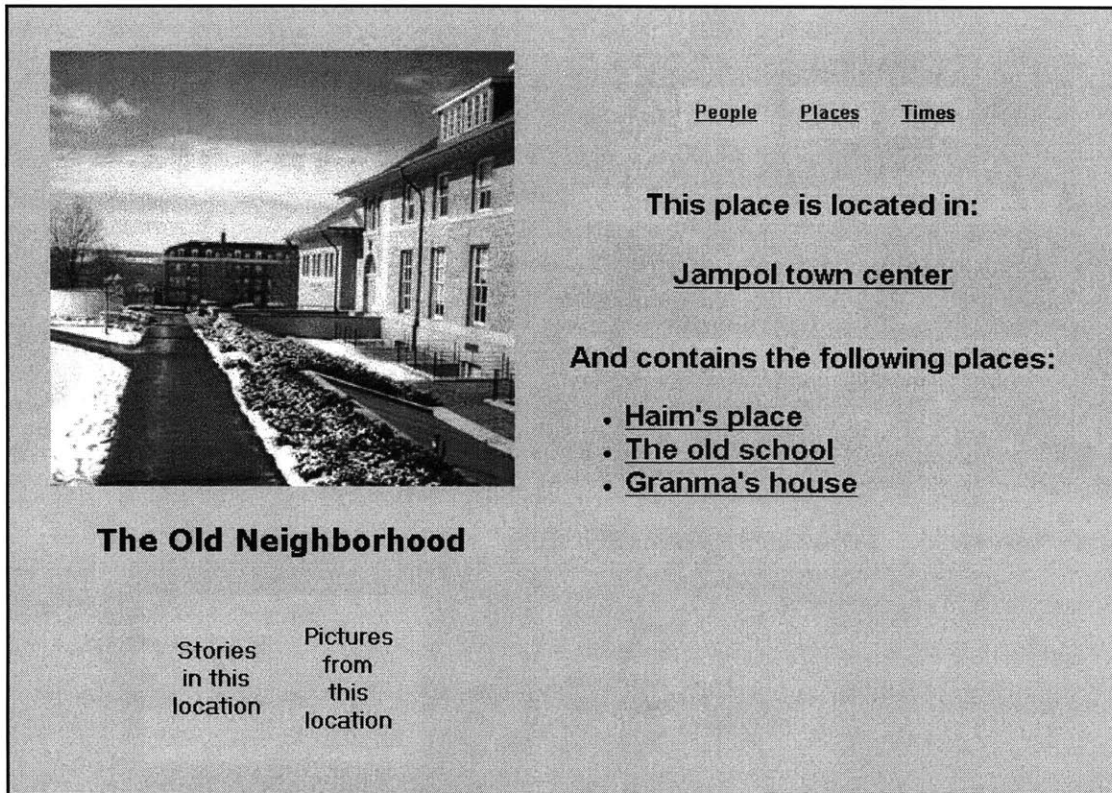
Figure 25: A mock-up location-page showing links to stories and pictures
as well as higher- and lower-level locations in the gazetteer hierarchy

9.3 The use of photographs

9.3.1 Photographs and interviewing

Old photographs are true links to the past, and according to [Lowenthal 1985 : 43] many of those asked treasure their photographs more than their jewelry. Indeed, photographs are considered more useful than most other media, including video recordings in eliciting memories and stories [Chalfen 1998].

Both oral historians and genealogists agree in crediting photographs with an improvement in interview quality, encouraging their interviewees acting as memory joggers, and allowing respondents to use pictures as significant validators of their testimony. Using photographs in an interview context "offers a rich recovery of data", and, "elicits much more

complete and precise information from respondents" [Collier, 1967/1986 and Borchert, 1982, as cited in Modell and Brodsky 1994 : 143] .

It must be cautioned, however, that none of the systems reviewed in Chapter 6 employ photographs in the above way. Both AKA Kurdistan and Community Memory use photographs for eliciting stories, but they do so by using them as props with no previous narrative in place.

A different methodology for the use of photographs in eliciting stories is described in [Modell and Brodsky 1994]. Aiming to produce an oral history of Homestead, a town in Pennsylvania, Modell and Brodsky set out to interview inhabitants of this town possible. They proceeded by dividing the interview into two distinct phases:

We encouraged people to tell the story of Homestead as freely as possible and then -after giving a verbal account- to respond to the photographs we presented to them or they showed to us. [Modell and Brodsky 1994 , emphasis mine]

In the first phase, Modell and Brodsky asked informants to tell their stories about the town in their own words. The second phase of the interview in which photographs were introduced began only after interviewees had finished providing their narratives. In this second phase

Individuals brought out the linkages they had made: finding in pictures affirmation of a point made in verbal narrative or returning to an earlier point with an expanded perspective on what they had just finished saying... [Modell and Brodsky 1994 : 158]

Respondents used photographs to elaborate on a topic that they had already covered:

With an array of photographs in front of them, [interviewees] placed their lives in a wider context and accorded significance to the information they had provided. In the process of interpreting photographs, they took on the status of informant rather than interviewee or storyteller [Modell and Brodsky 1994 : 159]

That is to say, photographs were used to expand or confirm what had been previously stated, but not as the main axis of storytelling. On the contrary, Modell and Brodsky's proposed method brings photographs into the

interview only after a time-based, sequenced narrative was already in place, and the reasons for doing this are solid:

1. The coverage afforded by photographs is not exhaustive in chronological terms: there must be very few families in the world that endeavor to take pictures at relatively short regular intervals. This means that making photographs the center of the interview forces the narrative around those fortunate and preciously few instants that were preserved for the future by the camera.

2. The coverage afforded by photographs is not representative: The occasions at which pictures are taken likely do not reflect daily life nor history. To the contrary, pictures are often taken at special occasions. They perpetuate only specific instants from a group's existence, and as such can only offer discrete portraits of singular instants in a time continuum, chosen for reasons particular to the group. [Zeitlin et al 1982 : 6] warn about the ways in which scrapbooks can skew reality:

On looking through the Williamson family photographs, we might figure that they lived in a snowy northern climate. The truth is that all of the family's pictures were taken on those rare occasions when it snowed on their tobacco farm in sunny South Carolina. That is when they were inspired to take out their camera. [Zeitlin et al 1982 : 6]

Because of the above, the use of random pictures in isolation – that is, without a temporal and topical context already in place - for prompting memory recall may lead to a fragmented narrative as the interviewee hops from one time period and topical facet to another to describe the photograph's contents.

This is not to say that pictures are not to be used as prompts; only that pictures should be shown to the user once a narrative (temporal and topical) frame been established. Showing pictures whose content match the corresponding context through one or more of the three narrative indexes outlined in 8.1 will actually enhance recollection and improve the quality of the materials obtained.

9.3.2 Annotating photographs with indexes

In order to be able to match photographs with keys extracted from stories,

images need to be annotated with relevant information that will allow them to be retrieved and displayed in appropriate contexts. As is the case with stories, pictures can be annotated with temporal and location information. In other words, persons appearing in each picture can matched to the internal representation of those people present in the system

Photofinder, a system developed by the University of Maryland Human Computer Interaction Laboratory as part of its research on Personal Photo Libraries [UMD-HCI 2000], allows users to do just that. The goal of *Photofinder* is to allow users to browse, view, locate and organize, photos according to the following indexes: persons appearing in the picture, date, location, and a description supplied by the user.
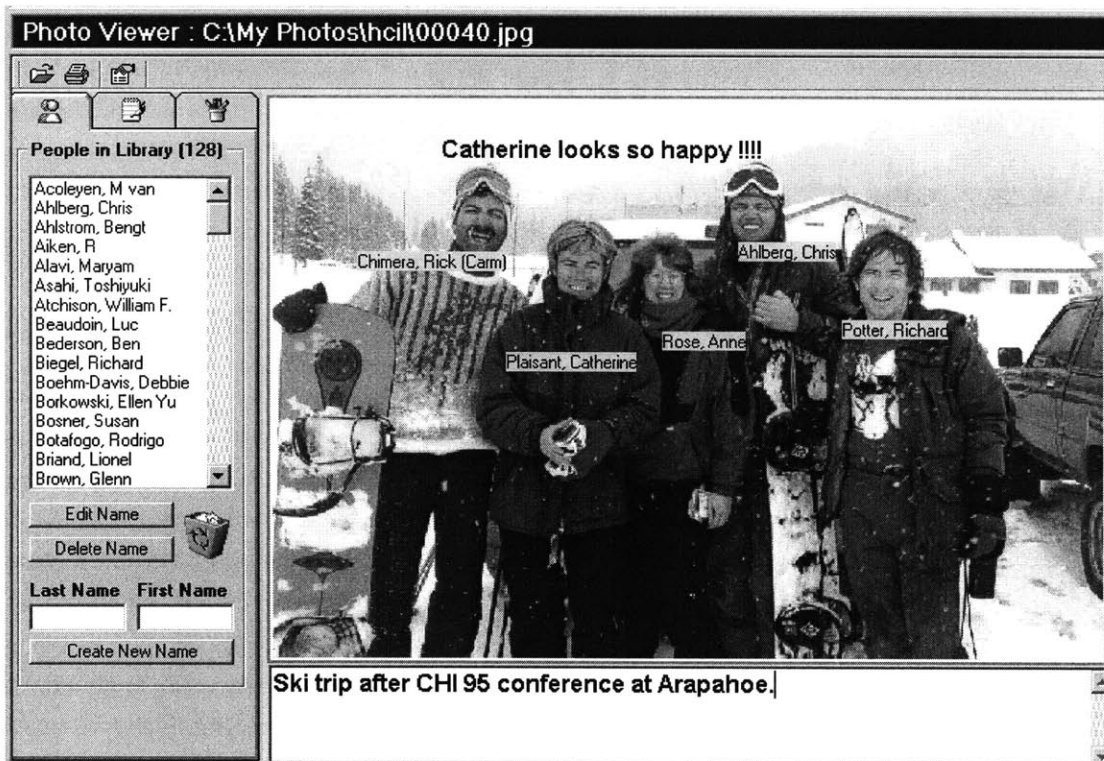

Figure 26: Picture annotation with PhotoFinder. Note the name tags on each person, created by dragging the names from the "People in Library" list on the left of the screen

Interestingly enough, even though this was not one of the goals of the project, its authors have recognized its potential for storytelling:

In PhotoFinder 3.0, captions can be added at any place on the photo as well as in the textbox below the photo. The contents and the position of captions are automatically saved in database so that they can be used for searching. Rich annotations and captions are the basis for successful story telling among people.

This recognition has led them to develop a module called *StoryStarter*, which allows users to publish pictures along with their associated captions on the Web:

StoryStarter allows users to take a collection of photos that have already been annotated and publish web pages using any of the information stored in PhotoFinder. The web pages are meant to be a starting point for sharing stories with family and friends using digital pictures.

Photofinder has multiple features that vastly exceed the scope of these design guidelines. But its basic annotation tools are extremely relevant and as recognized by its authors can provide a solid foundation for an on-line community focused on collective reminiscing and storytelling.

9.4 Visual design

Family storytelling usually takes place in living rooms, campfires and any other locations where people can wind down and leave their worries behind for a while [Rosenbluth 1997 : 4]. The visual design of an on-line community for storytelling should also emphasize relaxation and openness.

The best way to achieve this is by providing an environment that emphasizes smugness and warmth. The goal is to make members feel at home. Plainliness and modesty make visitors feel welcome and at ease. On the contrary, lavishness can make visitors feel either self-conscious and shy or emboldened and pretentious [Oldenburg 1999 : 37].

It would also be appropriate for a virtual place whose goal is to foster the sharing of stories about the past to display the look of something at once homish and old. An appearance of age, use and wear indicates presence, habitation and continuous use through the years; the rough imperfections on an old house or a centuries-old piece of furniture may actually make them more aesthetically appealing, if not for their beauty, because of the

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historical ambience they evoke [Lowenthal 1985 : 181, but see all of Chapter 4,. pp. 125-182].

Tranquility invites the telling of stories; plainliness invites spontaneity and relaxation; mellowing marks of age may actual render a place more attractive and familiar. These are the visual design qualities that an on-line community for family storytelling should reflect.

10 COMMENTARY: A SYSTEMS ANALYSIS PERSPECTIVE

Genealogical research in families is almost always carried out by a single individual. Motivations can be diverse [Polking 1995 : 13], but the procedure for collecting family stories traditionally follows what I call the standard model of genealogical inquiry. Under this model, genealogical information is obtained and maintained by a single individual, with relatives playing the role of passive informants.

As we shall see in the coming pages, providing family members with an on-line community for them to share their stories from the past does much more than just foster a forum for discussion: it literally turns the way of doing genealogy on its toes.

10.1 The standard model

Under the standard model, a genealogical project revolves around a single person, the family historian, that (often self-appointed) individual who takes upon him- or herself the task of collecting, storing, processing and publishing the genealogy, memories and narratives of a family.

The genealogical project is usually divided in two stages:

1. In the first stage of the genealogical project the family historian will usually carry out a number of interviews with relatives, recording their memories and stories and obtaining documents and photographs that support their narratives. He or she will later process and store these materials. These can be in the form of tape recordings (for interview material), photocopies (for documents and certificates) or digital documents based on computer systems such as those discussed in Chapter 6. But regardless of the media used, the fact remains that both narratives and supporting documents are obtained by the family historian from a number of different sources and stored in a central repository.

2. A second stage of the genealogical process is optional and involves the processing of the above materials to generate an end-product that can be published and re-distributed among family members.

As one can readily observe, within the standard model the family historian is the only active participant. This has several disadvantages:

- **Isolation:** Family members do not get to meet or speak together and receive no encouragement or motivation to discuss the ongoing project as it progresses. Even though discussions about the project are likely to take place between family members who are already in touch, the standard model does not require (indeed, it actually discourages) any kind of family meetings or reunions, and provides no inducement for extended kin to get in touch.

- **No snowball effect:** Family members do not get to see any results from the project until the very end, when a final document is produced and distributed. Their only contact with the central repository is through the family historian and whatever snippets of previously obtained information he chooses to share in later interviews.

- **Limited Access:** The family historian acts as a unavoidable middleman between informants (family members) and the central repository. Once the historian has already interviewed a family member, scheduling further interviews with the same person can be difficult. And even though additional information can always be obtained through other media such as e-mail or telephone calls, the existence of a single channel with limited availability mediating between informants and the central repository makes the standard model suffer in terms of flexibility and spontaneity.

- **Bias:** The end product of the genealogical project is a document produced by the family historian. Both the historian and family members will expect it to be the "official story" of the family. This means that he or she will at some point face the need to choose a single description from among competing versions of events, and to distill and collate conflicting views and opinions on specific persons or topics into a single narrative. Because of this the end product is

liable to reflect the biases and points of view of a single person, instead of presenting the different views of the group.

- **Termination:** Once the end product has been published and distributed, carrying out modifications is hard and expensive. In the case of printed media, such as books and paper documents, this is downright impossible. In the case of web pages, this again requires the time and work of the family historian. Family members, who perceive the project as having come to end, will not be as enthusiastic in visiting it again.

The resulting role of family members is that of passive information providers who remain isolated from each other and have very limited access to both the central repository and the end-product itself.

10.2 The collaborative model

Clearly, the genealogical inquiry presents ample room for improvement. In the following pages I shall propose a collaborative model for genealogy and family stories, based on a computer hardware and software platform, which attempts to turn the standard model on its toes. The emphasis is on providing infrastructure for collaboration, keeping in mind the original meaning of the word:

> *Collaboration: n. to work jointly with others or together, especially in an intellectual endeavor.*

The collaborative model for genealogy is based on an on-line community that

1) Facilitates access to the central repository through the internet and

2) Provides the necessary tools for contributing genealogical information and family stories to the repository as well as for accessing them with speed and ease.

The advantages of having a whole family participate on such an on-line community dedicated to genealogy and the elicitation and sharing of

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family stories (from now on called collaborative environment for brevity) are as diverse as they are profound:

- **Community**: Family members effectively get together in a virtual place. Old relationships can be resurrected and bonds can be strengthened among extended kin. Contact among family members takes place often as they meet on-line and work together on a joint project.

- **Snowball effect**: Family members get to see the project as it evolves, and are in permanent and frequent contact with materials contributed by others as the project unfolds.

  Previously posted contributions elicit more stories, inducing a snowball effect. In discussing the difference between private encounters and group interviews, Zeitlin et al write:

  The group interview context, whether natural or induced, has one major characteristic that makes it extremely fruitful. The interaction that occurs as a matter of course serves to spark the memories of the participants. One story leads into another, one interpretation elicits cries of "but that's not really the way it happened at all!". The end result of such an interview will differ greatly from private interviews with the same relatives. [Zeitlin et al 1982 : 265-266]

  Even though an on-line environment need not provide real-time interaction, the memory stimulus effect of stories is just as applicable. Contributions will thus be richer than would be the case if participants had no access to previous contributions.

- **Unlimited access**: A collaborative environment does away with any access restrictions, both in terms of frequency and bandwidth. It literally eliminates the need for a middleman or mediating channel between family members and the central repository. Information can be contributed by any participating member at any time and at any moment, as often and as many times as needed. The on-line repository is open to contributions 24-hours a day.

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- **Plurality and diversity**: A collaborative environment encourages and sustains a plurality of views. Dissent and dialogue are encouraged. No "official story" is created. Instead, dissenting opinions and conflicting views all find their place into the repository. [McCauley 1999].

- **Always evolving**: even though a collaborative repository is likely to reach a certain degree of maturation at some point, it will never display the finality of printed matter or a static website that are the work of another person and were never seen to evolve. A collaborative environment is always growing and always able to accept new contributions as new discoveries are made or new memories arise.

11 CONCLUSIONS

These are the stories that Dogs tell when the fires burn high and the wind is from the north. Then each family circle gathers at the hearthstone and the pups sit silently and listen, and when the story is done they ask many questions...

Clifford Simak, *City*

In spite of social changes and widespread mobility, extended family remains an important institution in most people's lives: "the contemporary kinship structure appears to be limited – in size, proximity, function and subjective importance... And yet, extended kin are available and relations remain crucial strands in the social fabric of most individual lives". The main reasons for this are technological innovations in transport and communications [Fischer 1984]. As a plus, a longer life expectancy means that – even though they may live far apart - the probability of having living grandparents is far greater today than it was a century ago [Segalen 1996]. The potential for sharing family stories and genealogical information is there, hampered only by vast geographical distances and infrequent contact. Fortunately, the existence and wide availability of the internet offers a solution to this problem. For the first time since the dispersion of kin in modern society started, technology can help restore the links that it once contributed to sever.

The use of computers for improving the quality and frequency of family communications is already high. Staying in touch with family and friends is consistently ranked by users as one of the main uses they give to their computers. *Lexmark's Report on Computing and the American Family* [Lexmark 1996] stated that within population of computer users with internet access, 74% reported using e-mail to keep in touch with their friends and relatives, and 63% stated they were "better able to stay in contact with these people specifically because of online access". Similarly high figures were obtained for the percentage of respondents using their computers to write personal correspondence to other family members (71%). According to the same report, among those homes equipped with computers, one-quarter (23%) informed that they used them to produce a

family newsletter. Similar results were obtained in a more recent survey by Seniornet [SeniorNet 2000], with 92% of respondents reporting using the internet to keep in touch with family and friends

Providing effective platform for allowing on-line collaboration can help channel this high demand for communication and desire for maintaining and restoring feelings of community among family members. Among the activities in which families can participate, telling stories and sharing memories about a common past are the most conducive to solidifying links and strengthening relationships among kin.

But eliciting and organizing stories is a delicate art. Providing virtual spaces for family members to meet is a useful first step, but just bringing people together on-line does not suffice. Appropriate environments must be provided and induced contexts must be created that facilitate interaction among family members. Tools that enable kin to share their stories can benefit from the experience of those disciplines that specialize in eliciting, indexing and organizing narratives: folklore studies and oral history.

The methods developed by these specialists in capturing and storing narratives have proved extremely useful in both obtaining stories during fieldwork and facilitating later access for research. As a matter of fact, it is not an exaggeration to state that techniques that facilitate the accessibility of material can be counted among the essential foundations of each of these two disciplines. These techniques are thus highly relevant for the design of communities that focus on family storytelling; equally important lessons can be gained by looking at existing systems that facilitate the exchange of narratives in light of the above theoretical background.

The guidelines presented on this thesis are based on a careful application of the above theoretical concepts to the design of an on-line community for family storytelling. Following these guidelines, an on-line community can be created that fosters and greatly facilitates the exchange of stories among extended kin. Using the tools provided by such a community, family members can become active participants as they collaborate in creating a composite mosaic of their shared, common past.

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