The Mythical Dream Interface
A Mythical Metaphoric Method for Redesigning an Interface

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You are led through your lifetime by the inner learning creature, the playful spiritual being that is your real self. Don't turn away from possible futures before you're certain you don't have anything to learn from them. You're always free to change your mind and choose a different future, or a different past. Richard Bach, *Illusions* [1, p. 63]

Abstract
This paper presents a language-based method for analyzing and redesigning a user interface. The underlying theory and a practical application of the theory are presented. The practical application involves presenting an analysis and possible redesign of the user interface of the Macintosh version of the Personal Ancestral File (PAF) genealogical program.

Introduction

There are two main world views, each with its own paradigm or underlying set of fundamental assumptions about the world. The dominant world view is the scientific one, which emphasizes objectivity and the importance of group experiences. The emerging world view emphasizes subjectivity and the importance of personal intuition and creativity.

The emerging world view is changing our values and the way we work. It is creating new roles for technical communicators. This paper explores one of these emerging roles—the role of a technical communicator in user interface design.

All our endeavors involve the use of language and we need to use the language appropriate to the endeavor. Rational language forms are essential tools for developing and improving what has already been found or invented. However, they cannot be used to find or invent anything new. What is needed in the enterprise of the new is a vision of what could be. This vision comes from within and is expressed in rhetorical language forms.

The language-based interface design method presented in this paper relies upon the personal intuition and creativity of someone who is competent in both language and technology—the province of a technical communicator.

In this paper I explore the use of myth and metaphor, in relationship to the rhetorical theory of Ernesto Grassi, and then apply my discoveries to the analysis and redesign of a computer interface. The ideas presented are still being formed but hopefully they are sufficiently formed to be useful to you. The paper is also intended to reflect the developmental nature of my thoughts with the intent of involving you in the "knowing in process" within me [13].

Underlying theory

It seems prudent to start with a brief review of the main points of Ernesto Grassi's rhetorical theory. This review is necessarily a selection and a deflection [5, p. 158] of Grassi's ideas; my biased and polluting interpretations are interspersed between direct quotes from Grassi's book *Rhetoric as Philosophy* [15]. Overall, Grassi distinguishes between two types of language—rational and rhetorical. And he shows that all rational language is built upon rhetorical language and he supports this finding with the theories of ingenium and metaphor.

Grassi found that "critical and rational modes of thought that have dominated philosophy since Descartes" [15, p. 36] require that the structure of natural sciences be derived from "philosophical premises and principles in order to erect a systematic structure of sciences. This enterprise leads to the idealistic effort of achieving a priori derivation of the structure of natural sciences" [15, pp.38-39]. How are first or original premises and principles discovered? Grassi says that they can't be found using a rational approach; they have to be invented! They are found by the faculty of ingenium and represented rhetorically within metaphor. Ingenium finds the relationships between inner experiences and metaphor mirrors those relationships externally within socially-structured language.

When interpreting metaphors, I think it is important to remember Grassi's quote of Kierkegaard's admonition to "'see ourselves in the text'...see ourselves in 'the mirror of the word' in order to see or 'find' a 'new' world in and through it. 'That is what we most of all must achieve in the mirror of the word; we must not look into the mirror but into ourselves'" [15, p. 111].

Grassi defines ingenium in the following way:

> "Providence has well arranged human things by awakening in the human mind first topics, and then critique, just as the cognition of things precedes judgements about them...just as critique makes them precise...and in early times the question was, above all, to find those things that are necessary for human life, and finding is the property of ingenium...The special faculty of knowing lies in the ingenium, with its help man collects the things which to those who possess no ingenium seem to be without any relationship to one another...Ingenium is the 'grasping' rather than the 'deductive' property. The grasp, however, precedes the deduction because we can only draw conclusions only from what we have already grasped. 'Ingenium is the faculty to unite what is dispersed and diverse'" [15, p. 45].

Also, according to Grassi:

> "Every careful method consists of two parts: one of inventing and one of judging...The Stoics have developed with great diligence the ways of judging, and that by means of the science they call dialectic; the art of inventing, which is called topics...they have completely neglected...it is dialectic to draw conclusions by means of rational deduction, while topics represent the art of

invention...The original 'finding,'...never can occur within a deductive process because it cannot reach beyond its premises...Topics is the theory of original vision...Topics finds and collects... critique divides and analyzes what has been collected..." [15, pp. 43-45].

Rational processes deal with generalities; that is, with what is common, shared and repeatable, and they can never help us to comprehend new, particular, individual, and unique phenomena. Is this because any rational decision and judgement is a selection, and hence also a deflection, of reality?

On the other hand, "Ingenium reveals something 'new'...something 'unexpected' and 'astonishing' by uncovering the 'similar in the unsimilar,' i.e., what cannot be deduced rationally" [15, p. 92]. This prompts me to ask if defining something in terms of what it is not —that is, by differences—is a deductive process and hence not related to ingenium but to the rational process. Ingenium suggests that new relationships can't be detected by rational deductive processes. It may be that once ingenium (which handles absence of external sameness by inventing a sameness to existing inner experiences) has shown the relationship, then definition in terms of the negative can come into play. This suggests to me that rhetoric always deals only with the positive and that differences are only within the realm of the rational—the realm of analysis and judgement of what is already present.

Visions and dreams

It is significant that Grassi says that "No living being strives toward the unknown" [15, p. 61]. In order to move towards the new we must first have some kind of idea or vision of what the new might be. Michael Polanyi defines a vision, which I associate with ingenium, as a "foreknowledge of things yet unknown and at present perhaps inconceivable" [21, p. 135].

I would associate vision with having a waking dream in the same sense that Martin Luther King Jr. used within his *I Have a Dream* speech [23, p. 219]. I'm reminded of a phrase from the movie *Dune* [8] where the Duke says to his son Paul "A person needs new experiences. They draw something deep inside longing to grow. Without change something sleeps inside us and seldom awakes. The sleeper must awaken." Why? I'd say so that we can live the dream while awake and thus invent our own reality in order to become the most supreme being that we could be.

I'm also reminded of *The NeverEnding Story* [9] wherein a small boy, Bastian, starts by being unaware that he is affecting the development of the story (the fate of Fantasia) and ends by discovering that what is happening within the dreamlike Fantasia is a reflection of his personal inner experience, and that his internally conceived hopes and dreams externally mold and shape his outer world. Bastian comes to realize that there is a dance between dreams and reality; I'd call this dance a vision or waking dream. Many of us are like Bastian; we are reluctant messiahs within our own, inner and outer, worlds [1].

I'd say that having a vision or waking dream is necessary in order to awaken the dreamlike ingenium. The messenger of ingenium is enlightening metaphor.

Myths and metaphors

David Feinstein and Stanley Krippner in *Personal Mythology* [11] define myths as "private theories that shape your life...such theories or personal myths...are ingrained models of reality that determine how you see the world and understand your place within it... Myths... are... the models by which human beings code and organize their perceptions, feelings, thoughts, and actions" [11, p. 2]. They also state that "Our most fundamental myths may be glimpsed through dreams and other products of the unconscious" [11, p. 35].

Jerome Bruner in *On Knowing: Essays for the Left Hand* [4] asserts that our inner subjective experiences are revealed to us in the form of personal myths which are stories that reflect our inner selves. These myths enable us to name and label inner subjective experiences and thereby externalize them so that they can be shared with others. We identify feelings and then label them. The flow of feelings and hence the flow of labels form a poetic story, a myth that is neither true or false in terms of the language used to tell the story. These stories typically use metaphor which is "so often the vehicle for mythic leaping" [4, p. 13] and "myth...serves...as a filter for experience..." [4, p. 33]. I believe that "mythic leaping" is another term for ingenium, and that ingenium is another term for intuition; I also believe that these terms mirror thought processes that orginate from another realm.

Ingenium finds relationships between inner experiences, which are then moved externally into language by metaphor. Dreams and myths also attempt to reveal personal inner experiences and strive to move relationships between inner experiences into our waking consciousness.

Myths and identity

Life-controlling myths are created from our experience with life but they in turn shape us; they form what Joseph Campbell has called the:

"'mythologically instructed community' a corpus of images and identities and models that provide the pattern to which growth may aspire—a range of metaphoric identities...a set of possible identities for the individual personality. It would perhaps be more appropriate to say that the mythologically instructed community provides its members with a library of scripts upon which the individual may judge the play of his multiple identities. For myth...serves not only as a pattern to which one aspires but also as a criterion for the self-critic" [6, p. 36].

Can one be free of mythologically constructed identities? For this to occur one must free oneself from socially authorized myths. How? The first step is awareness of these myths; awareness of the personal myths guiding your life.

A way of doing this was suggested to me by the following statements by Krishnamurti:

"...follow, not my words, but the thought which is active in you...the response of our own feelings...find out what your response is...not what somebody else's words are, but how you yourself respond...essential that we begin to understand ourselves first...without knowing your own way of thinking and why you think certain things, without knowing the background of your conditioning and why you have certain beliefs about art and religion, about your country and your neighbor and about yourself, how can you think truly about anything?" [18, pp. 22, 31-32].

"...there is an inward authority; the inward authority of one's own experience, of one's own accumulated knowledge, of opinions, ideas, ideals which guide one's life" [17, p. 15].

Krishnamurti suggests that true knowledge can only be generated from within and that this is only possible when we understand our own subjective response to language. We need to listen to and observe ourselves. This process can be started by identifying and then changing the personal myths that control us.

I find it interesting, and relevent to the current discussion, that William Glasser suggests in *The Identity Society* [14] that there has been a major

cultural shift within western society, which started around 1950, from a task or goal motivated orientation towards a role or identity motivated orientation with a focus on personal fulfillment, acceptance, and recognition. The "only way that you can maintain a successful identity is to accept and be accepted by others who believe you are worthwhile. A successful identity is gained through involvement" [14, p. 32]. The human qualities associated with gaining a successful identity are: "love and worth...to be involved with people whom one cares for and respects" and to "do a worthwhile task that increases his sense of self-worth and usually helps others to do the same" [14, p. 53].

If myths are the externalization of inner reality, models of how one codes and organizes inner experience, by the use of metaphoric language in poetic story form, then an analysis of the rhetoric used within these mythic stories might lead back to the inner experiences—to the perceptions, feelings, thoughts, and actions—that originated the stories; stories told using language which is itself socially constructed and which also constrains, restricts, molds, and predicts ones perception of reality. This suggests that my personality—my identity—has been formed by the personal myths that I have chosen, consciously or unconsciously, from the corpus of possible socially authorized myths.

What are my personal myths? They ought to be indicated by the major themes that appear frequently in my life. What things do I have a dominant interest in? Where do I expend effort? What do I identify with? What work do I enjoy?

I have a strong personal interest in the nature of reality. Why? Maybe I don't like my current reality and I wonder if this is all I have? No choices! Maybe I do have a choice! Maybe there are other realities.

Mother ran our home. She was the final arbitrator and authority. Although I don't remember much arbitration! Mother's decision was final! Now I have an almost destructive resistance to all kinds of authority. I don't like being told what I can and can not do. I resist most forms of group activity and am often the person on the outside looking in or, more likely, looking beyond the group. I am interested in, and have been involved in, what many would consider fringe areas. In many areas, I'm certainly not interested in the status quo!

Do our occluded visions or dreams of reality really affect the language we use, our behavior, and our actions? Or is it that language constructs our vision or dream? Need they be mutually exclusive? Is there an interacting dance between our vision or dream and language? I believe that there is.

I find Grassi's interpretation of Dante significant

> "...language arises as a question or an answer...in the context of some material or spiritual imposition of need. The imposition manifests itself as a task, and it is only in reference to this task that reality, as it is open to our sense organs, receives its meaning. Two aspects of this are important here; on the one hand the conveyance of meanings to sensory appearances...and on the other hand the imposition of a tension..." [15, p. 76].

The "task" is an immediate situationally-based one that must be dealt within the here and now. My understanding is that the "conveyance of meaning" is achieved within metaphor and that "tension" is created whenever there is a difference between what is known and unknown as defined by some vision of what it might be. This tension is a necessary and essential condition for the initiation of the faculty of ingenium.

It seems to me that inconsistency may be needed to increase our involvement and learning of a task. I think that this may be true if you are new to an area and inconsistency is controlled, but after gaining experience in the area, inconsistency seems redundant and annoying. Increased involvement and success in dealing with inconsistency may create a sense of real achievement and a feeling of self-worth. Maybe not! I'm reminded of impressionistic art forms with their focus on style rather than content to increase individual involvement. Did it work? Or did it alienate people? My judgement call is that it probably alienates those who haven't been educated in the same way as the artist, those of a different discourse community.

Myths and society

According to Feinstein and Krippner our technologically oriented culture "has discounted the mythological dimension that underlies the material realm" [11, p. 6]. At the same time "the diversity of the mythic images we encounter through electronic and other media can also be overwhelming...Never have so many visions been available to choose from, nor has there been media so capable of parading those visions in front of you" [11, p. 7].

So much so that I'd say that this has led to the current confusion between agent with agency when we conclude that the media is the message and myths are not meaningful. Discounting the mythological dimension has also resulted in the loss of the unifying force of history since "A primary role of myth always has been to carry the past into the present...the half-life of a valid guiding myth has never been briefer, and we see new myths being hammered out daily on the anvil of peoples lives" [11, p. 6].

So the "corpus of images and identities and models that provide the pattern to which growth may aspire— a range of metaphoric identities" [4, p. 36] has been declining and replaced by more dispersed, and less integrating and satisfying, myths generated from the rise of the new religion of science and its evangelist technology, which provides new sacraments for mass consumption immediately in the here and now.

What are some of the myths authorized and supported within our society? The following immediately come to mind but I'm sure there are many more. Learning is difficult and anything worth knowing should be difficult. All good medicine must be bitter. If something is easy it's not worth much. Any connection to the Protestant work ethic? Consistency and inconsistency living together would seem fertile ground for digging for myths! As would easy and difficult, contradiction, and ambiguity. A myth characteristic would seem to be the ability to sustain contradiction, ambiguity, and opposites simultaneously in a metaphoric story that still seems plausible and meaningful.

Have we, as a society, become more of a consumer society since the 1950s? Has the rise of science and its servant technology destroyed many of the previously authorized and possible societal myths? Has this resulted in a dearth (as in scarcity that makes dear) of myths and hence identities to live by? Is this the source of the identity crises within western societies and the lonely and almost fanatical search for a personal internal identity? Have we become more interested in our personal identities because of the decline in the range of identities available to us through our culture? It does seem that we are no longer a mythologically instructed community and the old community myths have lost their appeal and controlling power.

Where does the controlling power now reside? The loss of communally-formed identity seems to be reflected in our constant attempts to gain personal control of some aspects of our life.

I think this is illustrated well in the following examples of how we deal with inconsistency and in how we interact with computer technology.

The Mac interface gives less control. This can be really distressing to people who need to be in control. I remember feeling really uneasy when I first became a manager because I had less control of details than I used to have as a writer. I had to learn to relinquish control at one level in order to gain more control at another one. I underwent a novation. I believe that I now deal with greater levels of ambiguity but that I have gained a greater control of seeing new relationships. Perhaps this is a necessary condition in order to initiate ingenium!

I also remember my experiences when I moved from programming a minicomputer to an IBM mainframe, then to a Mac, and subsequently to Unix. The experience of users with computers and the level of control they have been accustomed to, seems to be an issue. When I moved from a minicomputer to a mainframe I had to give up control; it should have been easy; it wasn't. You would have thought having to deal with fewer details would be easier! When I moved from the mainframe to the Mac, I lost even more control and I experienced annoyance at not having direct control of some functions. I also find it interesting that I used to enjoy programming, now I don't. I just want the system to figure things out and do it with minimum involvement from me. I don't have the need anymore to have control over certain details and therefore don't feel the need to work to fulfill those needs. This suggests that different roles generate different needs and hence a different type of work (same as involvement?) to fulfill those needs.

Dominant societal myths

It seems to me that the dominant myth within our society is that of consumerism. Our identity is closely aligned to what we can buy; to what we can physically possess. The rarer the better (less is better) and the more sought after the better (more is better) encompasses all options and contradiction is contained within the myth and thus would seem to meet a prime characteristic of myth. This presumably prompted Dudley Young to describe consumerism as

> "The modern religion of getting and spending..." which "manages almost to conceal...a spiritual confusion that may without exaggeration be called an identity crises" [25, p. xvi].

The dominant, and one might say tyrannizing, role expected within our consumeristic and consumptive society is that of the acquisition of material things. And our identity seems directly connected to how much we can own and buy. Our material possessions seem to define our sense of ourselves and our feelings of self worth and importance. I'd say that our acquisition of material possessions—houses, cars, clothes, etc.—is an attempt to satisfy our need for attention and recognition which appear to be our primary means for gaining a sense of personal self worth and importance; see Derber, *The Pursuit of Attention* [7].

The acquisitive role we are expected to play within society is not satisfying. Why? I think it is related to a dearth of effective means for giving and receiving constructive forms of attention and recognition within our society. We seem to be continually striving for and pursuing attention and recognition but we rarely find a satisfying source for both and we seem to go to extraordinary lengths to acquire them. But this acquisition is based on the same myth that motivates us to acquire material things, we look for them externally to ourselves. Is this related to the mythic ideal of external objectivity and the denegation of the importance of subjectivity? Most of us also work for organizations which promote themselves but not the work of the persons which comprise them. The impersonal organization receives the attention and recognition for the work done by the persons within it. Individual personal attention and recognition are a mirrored reflection of that received by the organization. This doesn't seem to be enough, we seem to crave a direct and undistorted personal source of attention and recognition.

In my local newspaper I came across an excellent example that illustrates what I'm saying. Software programmers are creating secret screens that are displayed when unusual key combinations are pressed, these screens are an attempt to gain personal recognition. According to the article:

> "In one program, the heads of the software team drift across the screen and eventually disappear...People want recognition for what they've done and want part of themselves in the program...What is perhaps remarkable, given the general banality of the screen's messages, is the extraordinary amount of time programmers have invested in creating them...the need for recognition and the need to personalize software are products of two realities of programming life. One is that programmers essentially see themselves as creative

people, like novelists in a way, although some outsiders tend to see them as nerdy technicians or crazed hackers. The other is that modern software is far more complex than before, often requiring the collaboration of many people, leading at times to a sense for the programmer of being nothing more than part of a huge machine" [20].

I do something similar when I program and write documents; my name or birthdate usually appears somewhere, usually in program comments and examples within documents.

Most of us are actively engaged in the lonely search for internal identity. It would seem that the acquisitive role promoted by the myth of consumerism (aided and abetted by the advertisement industry) is unsatisfying. More and more acquisitions don't seem to satisfy what appear to be our basic needs of direct personal attention and recognition. Another myth, the happiness one, also seems to be reinforcing and motivating us to continue our lonely search. We continue our acquisitive patterns of behavior, even though they don't lead to happiness. We seem locked into a structure from which there is no escape!

Interface redesign method

Are there any myths, or could we create any, that could be used to underpin an interface design that has a lasting and satisfying appeal to its users?

As a starting point, we need to explore answers to the question of: How do we break ourselves out of restricting structures which years of socially authorized and personally supported acquisitive patterns of behavior has built up and locked us into?

Do we, should we, acquiesce and design an interface to support dominant societal myths that are ultimately unsatisfying? I contend that such a design would quickly lead to dissatisfaction and have as short lived an appeal as the advertisements that promote the equally short-lived products that feed the consumptive need which, in turn, is fed by what seems to be our universal and ongoing fascination with the new [24].

Knowledge formation seems to form more effectively within a social context. I'd say that this is also true for gaining personal attention and recognition. I think that personal identity is formed as the direct result of personal involvement in playing a purposeful and meaningful role that provides opportunities for gaining personal fulfillment, acceptance, attention, and

recognition within a social context; extending this to interface design, this suggests to me that the interface needs to support this role.

Rational and analytic thought processes can only lead to resonance; and resonance can only occur in what is already present and not in what is absent. Any sphere of activity which does not create resonance within an existing structure but a "sense of wonder" is immediately and automatically rejected by anyone using an analytic frame of reference within an existing structure [16]. However, analysis is an essential tool for developing and improving what has already been found or invented. What is needed in the enterprise of the new is what Grassi calls ingenium.

Ingenium comes into play automatically in situations when there are no obvious relationships between things under consideration. Can the conditions necessary for invoking ingenium be created on demand? I'd say, emphatically, yes! And I'd say that they are the same conditions necessary for any creative enterprise; any enterprise associated with creating anything new in any sphere of human activity.

The process I'm recommending for the automatic invocation of ingenium is that mentioned by Robert Fritz in his book *The Path of Least Resistance* [12]. According to Fritz, our society emphasizes and authorizes the acquisition of knowledge from an external authoritative source and this is reflected in society by the dominance of the reactive-responsive orientation which conditions us to take action based on external circumstance [12, pp. 14-30]; this orientation operates within existing structures and can't be used to create anything new. This orientation reminds me of our society with its focus on the acquisition of external rather than internal knowledge. In order to create something new, a new structure must be created and a new orientation adopted [12, pp. 56-75]; this orientation operates by defining what you want (called a vision), followed by recording where you are (called current reality); the difference between these two positions results in structural tension. Ingenium will be automatically invoked whenever structural tension is present and it will attempt to resolve the structural tension in the direction of the chosen vision [12, pp. 76-88].

The redesign method I'm advocating has five stages:

1. Selecting an interface that is amenable to the stated task or goal of the method.

2. Defining a visionary role, as informed by personal myths, that you expect the interface to implot its users in.

3. Discovering the currently implotted role by recording and interpreting your personal reactions to the existing interface.

4. Comparing the current role and with the visionary role defined in stage 2 to create structural tension in order to automatically invoke ingenium to find ideas for redesigning the interface.

5. Analyzing the metaphoric language generated from stage 4 with a view to redesigning the interface in line with the vision defined in stage 2.

Goal of the design effort

The goal of the redesign effort is to design an interface that implots users in a role where they are doing a worthwhile, meaningful, and purposeful task that increases their feelings of self-worth, by providing opportunities for gaining personal fulfillment, acceptance, attention, and recognition, whilst enabling them to help others do the same. Some interfaces might be more amenable to this design approach. What we choose to analyze and our response to it is also motivated by our need to communicate with ourselves, to discover meaning from within; an attempt to discover our selves—to fulfill ourselves, to find ourselves within.

Personal response analysis

Your personal response to the interface with a focus on its inherent metaphors, as opposed to elements in the interface itself, is what should be recorded. A response statement aims to record the perception of your experience and its spontaneous consequences such as feelings, memories, thoughts, and associations. A response statement involves recording your affective evaluation; producing a record of our affective-perceptual experience rather than a description of interface elements. Recording response in this way leads to using language denotatively, usually without awareness of its evaluative or affective cast [2, p. 147]. I think of the response statement as a poetic story, a myth, that provides access to inner experiences and their relationships discovered by ingenium.

The development of knowledge from the response statement involves making a decision on an interpretive strategy. David Bleich views knowledge as a negotiated judgement which facilitates personal involvement in the development of knowledge. Since knowledge is founded on a conscious motivated search

for judgements, this implies that one must first ask what one wants to know or explain [2, p. 152]. The context for interpretation is the motivation present—as signaled by the question to be answered. Approaching the interpretation of a response with a specific purpose is a form of dialectic. The judgements formulated from this dialectic between one's experience with the interface and one's life experience represents usable consequential knowledge [2, p. 158].

These ideas form the basis of the subjective criticism method advocated by David Bleich. The method involves recording the user's spontaneous response to the interface followed by an interpretation of the response to form new knowledge. According to Bleich, a valid response is a description of psychological issues involving the expression of needs, feelings, emotions, associations, values, and beliefs of real and symbolic objects and people. The response analysis is initiated by determining what one is motivated by; that is, by answering the question of what one wants to know or explain; this forms the interpretive context. This then leads to the selection of an interpretive, or judgmental, strategy.

Bleich identifies four types of judgements. *Judgements of taste and changes in taste* that are motivated by the need for self-enlightenment; these judgements reflect values which are usually revealed by personal and interpersonal historical references [2, pp. 153-156, 190-212]. *Judgements of meaning or significance* that are motivated by social and learning needs; they usually assume a moral character [2, pp. 156-159, 213-237]. *Judgements of real and symbolized authors* that are motivated by the need to know the intentions of others and what they profess to know [2, pp. 159-162, 238-263]. *Judgements of common interests and the classification of authors* and texts that are motivated by the need for identification with a community [2, pp. 162-166, 264-293]. An interpretive strategy involves all types of judgements but two are usually dominant.

In the context of interpreting my response to an interface, what question should I seek an answer to? I think that I should seek an answer to "What underlying myths are reflected within my response?" This question suggests to me that I should use an interpretive strategy based mainly upon judgements of taste and judgements of meaning and significance. I should, therefore, focus on response expressions relating to social needs and references to personal and interpersonal history; with particular attention to looking for significant images, identities, models, and themes relating to gaining personal fulfillment,

acceptance, attention, and recognition. This interpretive strategy should reveal the dominant myths reflected by the interface and such awareness provide a basis for suggesting the role the interface implots its users in. On the assumption that users are preoccupied with their personal identity and the roles they play in society, such information will define current reality regarding the role expectations of the current interface.

Applying the method

I will now demonstrate the use of the method, which I've labelled a mythical metaphoric method, using my personal experience with the Personal Ancestral File (PAF) program. The method involves:

1. Selecting an interface amenable to the stated task or goal of the method;

2. Defining a visionary role that you expect the interface to implot its users in;

3. Discovering the currently implotted role within the current interface;

4. Comparing current and visionary roles to create structural tension; and

5. Analyzing the metaphors generated from stage 4 for redesign ideas.

1. Selecting an interface

The purpose of the PAF program is to help you record details of your personal genealogy. I'd say this task has a specific meaningful purpose and will be of worth not only to oneself but to others. The task also offers opportunities for gaining personal fulfillment, acceptance, attention, and recognition within the social context of a family.

2. Stating a visionary role

The vision of the role that I expect the interface to implot its users in is informed by my personal myths regarding my vision of the nature, purpose, and destiny of all people on this earth.

I believe that people are composed of three parts: an indestructible part, called intelligence, that has always existed, and always will; a spiritual material form that permanently encases this intelligence and that this encasement occurred at some time prior to this plane of reality under the direction of a superior intelligence, this union of intelligence and spiritual form I call my spirit; and finally, a physical part which encases my spirit, which I call my mortal soul, this union occurs in the fetus and is subject to separation that may occur temporarily during life and perhaps permanently at

death. I believe that all three parts could be inseparably joined at some future time in some other plane of reality, I refer to this union as my eternal soul.

I believe that this physical life has purpose and that this purpose is to learn to love each other. Social interactions seem to provide the opportunities for learning to love. The primary vehicle involved in social interaction is that of language. It would seem that some language forms mediate the development of loving and harmonious relationships. I think that consciousness may exist in the non-local reality postulated by David Bohm [3, pp. 172-213], and as quoted in Michael Talbot's *Beyond the Quantum* [22, pp. 41-44, 83-110]. Consciousness then exists outside the physical realm but its expression locally is mediated by language. Furthermore, I lean towards the idea that the non-local realm is not constrained by the time-space continuum that seems to hold sway within the physical realm. Consequently, since I hold that consciousness is non-local, individual consciousness may be shared instantaneously across time and space; thereby giving the impression of a collective consciousness postulated by Carl Jung [6, pp. 59-69]. I also believe that consciousness itself is capable of evolving [19, pp. 35-68] and that it molds not only our perception of physical reality but that it is actively involved in creating its physical manifestation.

I believe that we are all embryotic gods and our destiny is to become gods; this is our true identity. The family provides the training environment for our purpose here—to learn to love. And hence there can be no compensation for failure in the home. Happiness, and unhappiness, has its origins within families; and families are meant to last forever. Whether or not our family will last forever is dependent upon certain personal actions we take during our earth life and upon our success in learning to love each other.

PAF is a genealogical management system for home computers designed to help you record, manage, and share your genealogical information. The above myths and purpose of the PAF system suggests to me that I should implot the user in the role of the family historian and savior—the keeper of the family flame.

3. Discovering the currently implotted role

Discovering the currently implotted role involves two steps. The first involves focusing on the metaphors used within the current interface and then recording the perception of your experience and its spontaneous consequences such as feelings, memories, thoughts,

and associations in the form of a response statement. The second step is an analysis of the text of the response statement motivated by the question "What underlying myths are reflected within my response?" The analysis will focus on response expressions relating to social needs and references to personal and interpersonal history; with particular attention to looking for significant images, identities, models, and themes relating to gaining personal fulfillment, acceptance, attention, and recognition.

Whilst performing this analysis, it seemed congruent to modify Bleich's method by presenting my response and its analysis together instead of separating them as advocated by Bleich. This is made possible because of my use of a word processor on a computer; a computer enables me to iteratively present my response, to analyze it, and to subsequently modify it. The final analysis may appear to be a contiguous flow of thoughts; in practice individual thoughts occurred in a discontinuous fashion and consubstantial ones were grouped together to frame the final analysis.

The first screen that flashes up and then disappears quickly is shown in Figure 1.

Figure 1: First PAF screen
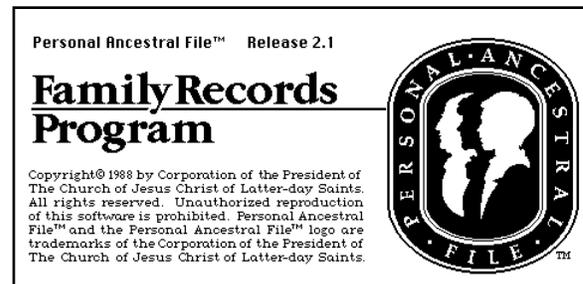
Since I'm a member of The Church of Jesus Christ of Latter-Day Saints (the "LDS" or "Mormon" church), my initial reaction is one of strong identification. I also felt a sense of pride and I hoped that the program would be good. Since the screen was replaced very quickly, I couldn't read the writing on the screen; this created a sense of mystery and I wanted to see it again. It was almost as if the program designer didn't want me to see who had designed it. This brings to mind the initial hesitancy that LDS church members have in mentioning the *Book of Mormon* because it is often a hindrance in talking to people about their beliefs.

In order to gain acceptance there must, at least initially, appear to be a sameness. Anything that indicates difference must be minimized. Rhetorically, I'd also say that creating a mystery increases the chances of

gaining acceptance. Hence the short duration of the first PAF screen. I sought the first PAF screen out again and was rewarded with the screen shown above. It is a screen full of significant metaphors! But maybe I only see the significance of these metaphors because I'm a member of the discourse community from which they spring. It should be noted, however, that I'm just one individual within the LDS discourse community and many other members would have quite different perspectives and interpretations than mine.

The **Family Records Program** title itself is a metaphor that is suggestive of the stated primary role of the LDS church—to help families achieve exaltation in the hereafter. According to LDS belief, exaltation means achieving the status of a god, which can only be achieved after death within a resurrected family assigned to an appropriate mansion above. In order to get into the best mansions (those associated with exaltation), you must be a member of the LDS church and have completed certain actions only possible by a person whilst alive on this earth.

Latter-day saints think of their church President in much the same way as Roman Catholics think of their Pope. Hence, to an LDS person, including the term "President" within the copyright notice lends the program the supreme sanction of the ultimate divine authority on this earth. This conditions me to accept the program and raises the expectation that the program will be good. I think the program is excellent but I find myself wondering how much my vision of what I expected it to be has led to such an opinion. I'm also left with a feeling that it seems inappropriate to have a church publishing software! I think this feeling is probably informed by the societal myths of what a church should be involved in—software publishing isn't included!

The major element on this screen is the PAF logo; this logo is also featured prominently on all PAF documentation. It is a metaphor which is suggestive of a number of significant sacred beliefs—myths—held by members of the LDS church.

The three silhouetted busts are suggestive of ancestral movement from a young boy, to a mother, and then to a father or grandfather. The movement backward from right to left suggests going backwards and downwards (towards death and hell?) and hence of ancestral history. Since I'm male, the arrangement of the three busts on the logo fosters an even greater identification; however, I'm left wondering how a female user might

feel—especially when the female bust is black and constrained between two white male busts.

Is this because I see white as a metaphor for purity and nobility, and black as a metaphor for evil and baseness? This suggests another hidden layer of metaphor, that of Eve being representative of all women—Eve was tempted and, being unable, or not desiring, to resist, sinned, and from then on became subject to the direction of Adam who is representative of all men. On the other hand, such an arrangement does mirror the patriarchal vision of a family held by members of the LDS church. The head of the family is male and it is his divinely appointed role to lead his family, step by imperfect step, towards exaltation.

The **Pedigree Search** (see Figure 2) and **Family** (see Figure 3) PAF screens also mirror the patriarchal and hierarchical LDS vision of the family, in that the male is shown above the female; father above mother and husband above wife.

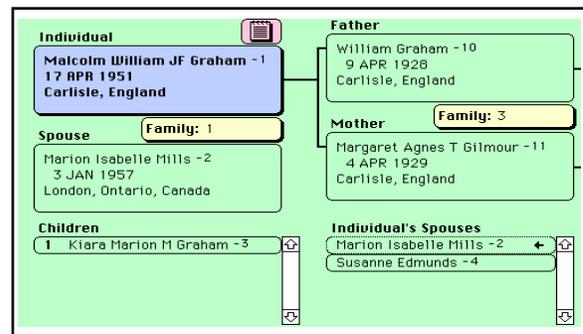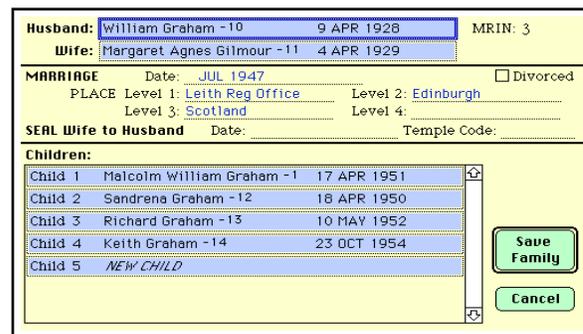**Figure 2: Pedigree Search PAF screen**

Figure 3: Family PAF screen

I'm also reminded that my father—William Graham—died when I was seven, and I feel a sense of guilt at not remembering anything about him. My earliest memory dates from the time of my father's death. His death was caused by a tractor overturning and crushing his life, probably slowly and painfully, out of him. I remember, almost dreamlike, walking down a corridor with a door

on each side and one at the end. My little steps took me past the doors on each side, leading slowly toward the slightly ajar door at the end. Through the door, within the room beyond, lay a closed coffin. Nailed closed. So final. Within the coffin lay the body of my father. According to the LDS church, there are certain actions that I can perform on behalf of my father that will offer him the opportunity for gaining exaltation and the opportunity to be with him, and my two dead younger brothers, in the hereafter. This represents a motivator for doing genealogical work.

The actions needed and where they must be performed are indicated in the **Family** (see Figure 3) and **Individual** PAF screens (see Figure 4).

Figure 4: Individual screen

According to LDS belief, all individuals must receive sacred ceremonies (either in person whilst alive or by a proxy when dead). Baptism is needed for entry into the church; the endowment is needed to provide knowledge needed for progression in the hereafter; sealing to parents and sealing wife to husband are needed because all civil relationships—marriage and family—cease at death.

Enough analysis has been presented to postulate that the main role implotted in the PAF interface is that of gathering data so that certain sacred ceremonies can be performed on behalf of dead family members so that they might have the opportunity for progression in the hereafter. I would suggest, however, that the active parts of this role are only apparent to those informed by LDS myths.

The common role implotted within the PAF interface for all users is simply that of a data collector and form filler—a menial role at best and certainly not very inspiriting.

4. Comparing current and visionary roles

This stage involves comparing your vision of what role you want the interface to implot its users in with the role the current interface implots them in. This will result in an awareness of difference and the creation of tension between these two roles for the automatic invocation of ingenium, leading to ideas for redesigning the interface towards the chosen vision of what it could be.

In this stage it is important to maintain the tension in order to invoke ingenium. The outcome of this stage will be a metaphoric language that may or may not be connected.

The current and visionary roles to be compared are:

• **Current role**. The common role implotted within the PAF interface for all users is simply that of a data collector and form filler—a menial role at best.

• **Visionary role**. The PAF interface should implot the user in the role of the family historian and savior—the keeper of the family flame.

How can the interface be redesigned to implot the user in a role that seems less menial? My initial idea was of using a game interface. However, since I believe that this type of interface fosters the external acquisitive role promoted by the consumeristic and consumptive myth I rejected this type of interface. In addition, I'm not a computer game player nor do I like the kind of game interfaces that I have come across, so the idea of a game-type interface didn't appeal to me personally. There seemed to be no alternative! Then eureka! Ingenium came into play.

The idea of a narrative or story interface with hyperlinks suddenly jumped into my mind and I knew that I could use this idea as the basis for redesigning the PAF interface. I immediately recorded the following, connected and unconnected, ideas.

• The narrative or story interface needs to deal with the following: involvement, identity, myth, metaphor, roles, experience, tasks, reality, models, needs, control, action.

• Use of a story with hyperlinks to start the appropriate program section? Metaphors? Tree? Geological? Genealogical? House? Town? World? Arms? Clouds?

- Since the PAF program is a genealogy program that is intended to document my family tree, why not use a tree metaphor with hyperlinks; I would then be able to use roots, trunk, branches, leaves to show relationships using a well understood physical and natural metaphor.

- Hyperlinks to what? Objects? Family objects? Brother, sister, mother, father, spouse, child. Use of other metaphors? Other ways of showing hierarchy? Connection to Foucault's archaeology and genealogy ideas [10, pp. 229–231]?

- Role purpose? Why am I doing this? Being a historian, savior, or both? Preserving the family history. Establishing unknown family relationships. Creating opportunities for the dead to make choices. Being a personal savior to the dead.

- "The bond that links your true family is not one of blood, but of respect and joy in each other's life. Rarely do members of one family grow up under the same roof" [1, p. 84].

- "If you will practice being fictional for a while, you will understand that fictional characters are sometimes more real than people with bodies and heartbeats" [1, p. 135].

- What myths do I want to promote and underpin the interface? Are there any existing controlling myths that I could use? Using the god myth? What is the purpose of life (to learn to love—indicators of love, caring, saving lives)? Destiny (to be saviors and to become a god)? Religious belief (does it matter)?

- Actions/activity/tasks/performance-drama-doing-process associated with objects? Two audiences— general and LDS. LDS—baptism, washings, new name, endowment, marriage, sealing.

- Appealing to both audiences by use of an ambiguous story of being a savior? Applying different implied metaphors to the words savior, save, eternal, and family. Use of the unifying myth of family? Motivation for action? Personal attention and recognition?

- **Savior**: "one that saves from danger or destruction" and "one who brings salvation"

- **Save**: "to preserve or guard from injury, destruction, or loss" and "to rescue or deliver someone"

- **Eternal**: "having infinite duration" and "characterized by abiding fellowship with God"

- **Family**: "a group of persons of common ancestry" and "a group of people united by certain convictions or a common affiliation."

5. Analyzing metaphoric language

This stage involves analyzing the metaphoric language generated from stage 4 with a focus on finding ideas for redesigning the PAF interface to promote the visionary role chosen in stage 2. I provide a redesign for the first PAF screen (Figure 5) and suggest how I would continue.

Figure 5: Redesigned PAF screen

Select family member you want to save	Personal Ancestral File (PAF) Families can be Forever
Mother	Life is what we remember and eternal life is achieved within your family.
Father	
Child	PAF will help you search out, record, save, and pass on your family relationships and memories.
Sister	
Brother	PAF enables you to act as a personal savior to your family.
Spouse	

This interface tells a story that implots the user in an intentionally ambiguous role by the use of metaphoric words that allow for alternative meanings. The main metaphoric words are *family*, *save*, *eternal*.

The unifying myth within the interface is that of family. However, the word family is being used as a metaphor for three types of family. The first is that of your immediate family as recorded by civil blood lines; the second family is that of those of shared beliefs; the third family encompasses all people on this earth (living and dead) and has a common spiritual father. So which family do you identify with? Which do you want to save?

Should the logo be redesigned to reflect what might be regarded as a more positive image of women? Since the logo does accurately reflect the LDS myth regarding the patriarchal family structure, I think I will keep the logo unchanged and thus the metaphors implied within it.

The first role implotted is that of the historian—the keeper of the family flame. The story implots this role by suggesting that we achieve eternal life only within the memory of the living. And if you want eternal life then its up to you to pass on your memories to your family. It is up to you to save those memories. You can

save memories on specific family members. Performing the actions necessary to record these memories implies that someone will find them interesting and will acknowledge your work and thus bring you recognition and attention (even though you might be dead).

The second role implotted in the story is more hidden but it will be readily discernible by LDS users. The role involves more than simply recording and passing on memories. The role is that of a savior in the sense of one who brings salvation. To an LDS user, families can literally exist forever. Being a savior means that you can participate in redeeming people who have died by recording their personal data and subsequently attending an LDS temple to perform ordinances vicariously on their behalf, and thus provide them with the opportunity for progression in another realm.

I have provided a redesign for the first PAF interface screen with a brief description of the metaphors and myths underpinning it. The next step would be to continue the redesign by exploring how I could apply the tree metaphor to the subsequent PAF screens.

Conclusion

My overall conclusion is that the mythical metaphoric method for redesigning an interface is practical but more work needs to be done in applying it to different types of interfaces. More work is also needed to verify whether any redesign based upon this method is, indeed, an improvement.

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