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MASTER OF FINE ARTS

Title ## The Birth Sign Library
a guide to astrological characteristics

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C O N T E N T S

INTRODUCTION

Inspiration

Concept

INSPIRATIONS

Introduction

The purpose of this thesis is to create an interactive multi-media astrological sign library. This project will be an educational guide to astrology and provide the user an opportunity to seek out their personal signs and discover the related astro-logical characteristics. In order to achieve an effective inter-active multimedia application, I intend to present it with text, images, sound, and animation to keep the topic interesting. To navigate within the application, I will also design a highly interactive interface for the user to explore.

About The Birth Sign Library

In creating this multimedia project, I have set out to help people develop a greater understanding of astrology. My aim is to take readers beyond the "Star Sign" or "Sun Sign" horo-scopes that are typically found in newspapers and magazines. Users could use Astrology to find out one's characteristics based on the signs. My intention is to inspire the users to find out their sign and to develop an interest in Astrology.

I would like the "Sun & Moon Signs Library" to be a successful application, allowing visitors to have fun learning how the zodiac influences them.

CONCEPT

Astrology is based on centuries of learning and wisdom. Your astrological chart was cast at the exact moment of your birth, and it's as unique as your fingerprints. The *Birth Sign Library* will help you better understand astrology, and, in turn, yourself and those around you.

Star Signs

The Star Sign is traditionally called the Sun Sign, and it is just the tip of the iceberg. Nonetheless, it's a great plac to start the astrological journey.

The Planets

There are eight Planets plus the Sun and the Moon. Each has an unique energy. I would like to educate people about what the planets symbolize and how they affect them.

Some Features of The Project Include.

This project will cover a wide range of topics - from careers to relationships, from personalities to aspirations. The *"AstrInfo" is a* section mainly for someone who wants to understand more about astrology. It provides the basics, includ-

ing explanations of Sun Signs, Elements and Qualities. *"Love&Home"* is a fun section which allows users to find their tendency to decorate their home and their Love and Passion Signs, and know which kind of family life is best suited to their temperament. You can even rate your love compatibility and gain more understanding of your partner. *"Aspiration"* is a career guide. This section contains articles, options of careers, and covers a variety of objects -- indicating which careers fit your personality. The *Daily horoscope* section will be updated weekly, and you can get a free personalized horoscope in seconds! I want to design a complete resource guide in the *"Profile"* and *"Personality"* sections. Included in these sections are your behaviors, personality, health and weaknesses. There is a another section which also gives the sky map of Zodiac stars. You can navigate it, from north to south, from east to west to have an overall understanding of its relative position. I also want to create a page that introduces the history of astrology and gives users some ideas of where astrology oriented and developed. The program would provide a rich selection of astrological information and fascinating graphics. It is used by both beginning students of astrology as well as full-time professionals, and also by individuals and companies that provide astrological computing services.

RESEARCH

Literature Research

<u>LITERATURE RESEARCH</u>

I searched for some related articles and literature about astrology. It was a good start for me to implement my project.

About Astrology

There is a lot more to Astrology than can be summed up in a weekly newspaper column. Here's information about the complex interactions that make you who you are. Astrology is one of those subjects which is easy to learn but can take a lifetime to master. Most people are familiar with the most basic aspect of Astrology, their Star Sign (or Sun Sign), and usually they can name at least one common trait of their Sign.

In the *Compleat Astrologer* , it discusses Star Signs that are popularized in daily newspaper columns, magazines, and other media. Unfortunately, many people think that their Star Sign is all there is to Astrology. While it is a good place to start, there is a lot more to Astrology than the Sun's position alone! Nor is Astrology a modern invention dating back only a few years, decades, or even centuries. Astrology has been studied for millennia, and it dates back as far as recorded history. The original Astrologers were priests and scholars, and they were looked up to as doctors and learned men. According to modern specula-

tion, the Three Wise Men of Christian belief were Astrologers! At this time, Astrology was the same science as Astronomy and Psychology, whose modern descendants arose from Astrology. In ancient times, the Greeks and Romans based their system of Gods on what they believed was up in the sky. Zeus, who was equated with Jupiter, and the other Gods and Goddesses were based on the Planets visible to the ancients.

The article also states that "Astrology was similarly popular in Babylon and Egypt, and it also rose in the Middle East, India, and China. Modern Astrology has changed with the discovery of new Planets: first Uranus in 1781, then Neptune and Pluto, and also the Asteroids. These three Planets have a stronger effect on generations as a whole rather than individuals, but they still have an important place in modern Astrology. Astrology is about the interaction between the Planets (including the Sun and Moon) and the Signs. The relationships between them and their interactions are mathematically based, and Astrology studies these mathematical cycles. Each Sign represents a different aspect of the whole human; Aries starts the cycle, representing the Self, and Pisces completes it, representing the mass unconscious of all mankind. In between, each other Sign carries the energy of a different phase of man's evolution within the universe. In some ways, the forces between the Planets involved in Astrology can be simplified into one word: gravity. The Sun has the greatest gravity and the strongest effect in Astrology, followed by the Moon, the Earth's

satellite. The other Planets are not truly satellites of the Earth, but they nonetheless have gravity and thus effect the Earth as well. The Sun controls the Earth's motion and the Moon controls its tides, but the other Planets have their own effects on the Earth -- and on the people who live here. Sometimes their influence can be so strong that they outweigh the Sun's energy!

In Frederick Goodman's _Zodiac Sign,_ he states that "Astrology can be understood as a philosophy that helps to explain life, rather than as a predictive tool. Rather than discussing what the Planets do to us, we can explain ourselves based on Planetary indications. The Signs work the same way: each of the twelve Signs is a unique combination of one of the four Elements and one of the three Qualities. The importance of Elements and Qualities in our lives is their demonstration that we are all part of the environment. There is a connection between all living things and all matter on this Planet. Astrology ties humans together: we are all faced with the same Planetary interactions, and we are all part of the same cycles."

The Importance of Astrology

But despite all these connections, Astrology does not tie you into being a certain way and it doesn't predict everything about you. Astrology explains the energy in your life and its potential challenges and possibilities, but you can evolve from your chart. Astrology is about you, in that what you can learn from it can help you make a choice between free will and destiny. In

addition, Astrology does not have to affect or change people's religious beliefs. In fact, religion has a nearly universal belief that the way you live your life affects whether you will go to heaven or hell (or a similar ideology) when you die. Astrology is talking about the same thing when it speaks of karma: what you do in this lifetime determines what will happen to you in your next lifetime. The philosophies are the same; they are just said in different ways.

Categories of Astrology

There are many different categories of Astrology. Medical, business, and stock market Astrology are often practiced for health or financial reasons. Weather Astrology is popular in some areas. Mundane Astrology is the study of politics, while Electional Astrology helps people find favorable times or days to get married, start a business, begin a new job, and so on. Horary Astrology is predictive, studying questions based upon the specific moment they arise. But the most popular type of Astrology is Natal,which analyzes people based on their time and place of birth.

There are two major types of Astrology practiced today in the Western World: *Tropical* and *Siderial.*

Tropical Astrology assigns the Signs based on their position in relation to the Spring Equinox, which marks the Astrological New Year and is usually March 21. The Equinox represents 0 degrees Aries.

Siderial Astrology assigns positions based on constellations, rather than in relation to the Equinox. At present, Siderial Astrology is 24 degrees behind Tropical Astrology, so a person born under 23 degrees Libra in Tropical Astrology is born at 29 degrees Virgo in Siderial Astrology. The Age of Aquarius is now upon us! This means technology is progressing forward, society's attitudes and values are changing and perhaps will slant more toward the radical, such as same sex marriages. Astrology will become more accepted and even mainstream!"

What Does Your Horoscope Tell You?

Astrology is about you. It is not an obscure science meant to be understood by a select few. Rather, it's a tool for greater self-understanding, allowing you to move through life with a clearer perspective on your experiences and those of the people around you. Real astrology goes far beyond the "Star Sign" astrology that is so prevalent in newspapers and magazines worldwide. Such astrology is far too general to be of any real use to specific people, and it does not do real astrology justice. It is used mainly for entertainment purposes.

Astrology is, in fact, based on all of the Planets and the Moon, not just the Sun. A horoscope is a map of the heavens at the exact moment of your birth; it is like a photograph of the sky with all the Celestial Bodies -- the Sun, Moon, and Planets -- in their respective positions. My project is more based on the Horoscopes. In real astrology, everything is taken into account:

the positions of the planets within the Zodiac, as well as their relation to each other and to the Sun and Moon. All of these energies affect you, and in some cases the combined energy of several Bodies can be more powerful than the Sun's position alone and even outweigh its influence.

Additionally, no two horoscopes are identical, even for twins; your horoscope is as unique to you as are your fingerprints. Many people are afraid of purchasing a horoscope full of arcane astrological jargon too difficult to understand without a great deal of study or professional help. But a well-written horoscope will explain technical terms in detail providing a clear, plain-English analysis of the chart. True comprehension of your horoscope requires that you understand how the astrological interpretation applies to you! Horoscopes can serve many purposes in your life, whether you are a skeptic or not. Horoscopes can provide personal insight. Reflecting on their meaning, you can learn more about yourself through self-analysis. Horoscopes help you to understand your tendencies, strengths and weaknesses. Skeptics and believers alike can use the horoscope as a jumping-off point for deeper exploration of the Self, examining each point of the horoscope with respect to the truth of what your horoscope claims. Horoscopes have great entertainment value, providing hours of juicy information to talk about with friends, lovers and relatives -- whether you believe it or not! Many people appreciate them as gifts, especially for significant birthdays, weddings, and the birth of

children. Horoscopes are useful not only for people; they can shed light on businesses, political events, even pets!

The Astrological Elements

The four Elements defined in Astrology are the major classifications that define the nature of the Signs. The Elements assign the Signs into Triplicities, groups of three Signs each that reflect the four common types of Signs. The Elements in Astrology are not "made up;" they are the same Elements known by ancient people: Fire, Earth, Air, and Water. These four Elements sustain life and enable man's survival, both in ancient times and today. How they combine with each other and in us determine how we deal with the world around us; in Astrology they are an important way for us to come in tune with nature and understand how nature effect us, both within ourselves and in our interactions with each other. They teach us that we are not separate from nature, we are nature. The Elements influence the way we think, and within a horoscope they can be seen as a quick summary of the Planetary influences. The Elements indicate a person's first reaction to what happens to them, how they think, how that individual will respond to what occurs in their life. If you understand what is prominent in your chart and in the charts of others -- if you have a number of Planets in Fire Signs, for example -- you get a very good indication of what motivates and inspires that per-

son. Conversely, the Elements that are lacking in a chart indi-
cate the areas of life in which a person may need additional
strength. Each Element reflects a quality of human nature and
corresponds with the Suits in both playing cards and the Tarot.

Purpose of Creation

By creating this project and providing information about
Astrology, which is both informative and entertaining, I hope
to move the perception of Astrology past "light entertainment"
to a more valuable tool for people to use on a personal basis
both for themselves and with others.

PROCEDURE

D E S I G N P R E C E D E N T S

Design is a funny word... In its narrowest sense, the term is used to mean visual composition of 2-D images and 3-D objects. However, as a computer graphics designer, I feel design can be seen as a process of integrating information from diverse fields. It is like when I am doing **"The Birth Sign Library"** project. As with all other aspects of design, **"The Birth Sign Library"** interactive multimedia is a design that communicates what was intended, and my goal is to create cohesive systems for this project.

Planning

The first stage is detailed and careful planning. Good planning is the key to starting a job.

First Step

Once the overall structure of the title and sections has been established, I inspect the project in detail, to establish a production schedule, and determine what the workload will be for the next three months.

Second Step

After trying out and rejecting many possibilities, I reached my final proposal. After my committee accepted the proposal,

the next stage was to start to build a series of working proto-types. I used the early prototypes to test and refine the title. Once I reached a satisfying solution, the final prototype was used to establish a design template for the rest of the project. I began detailed research into the information of each sign's characteristics, at the same time gathering pictures and images.
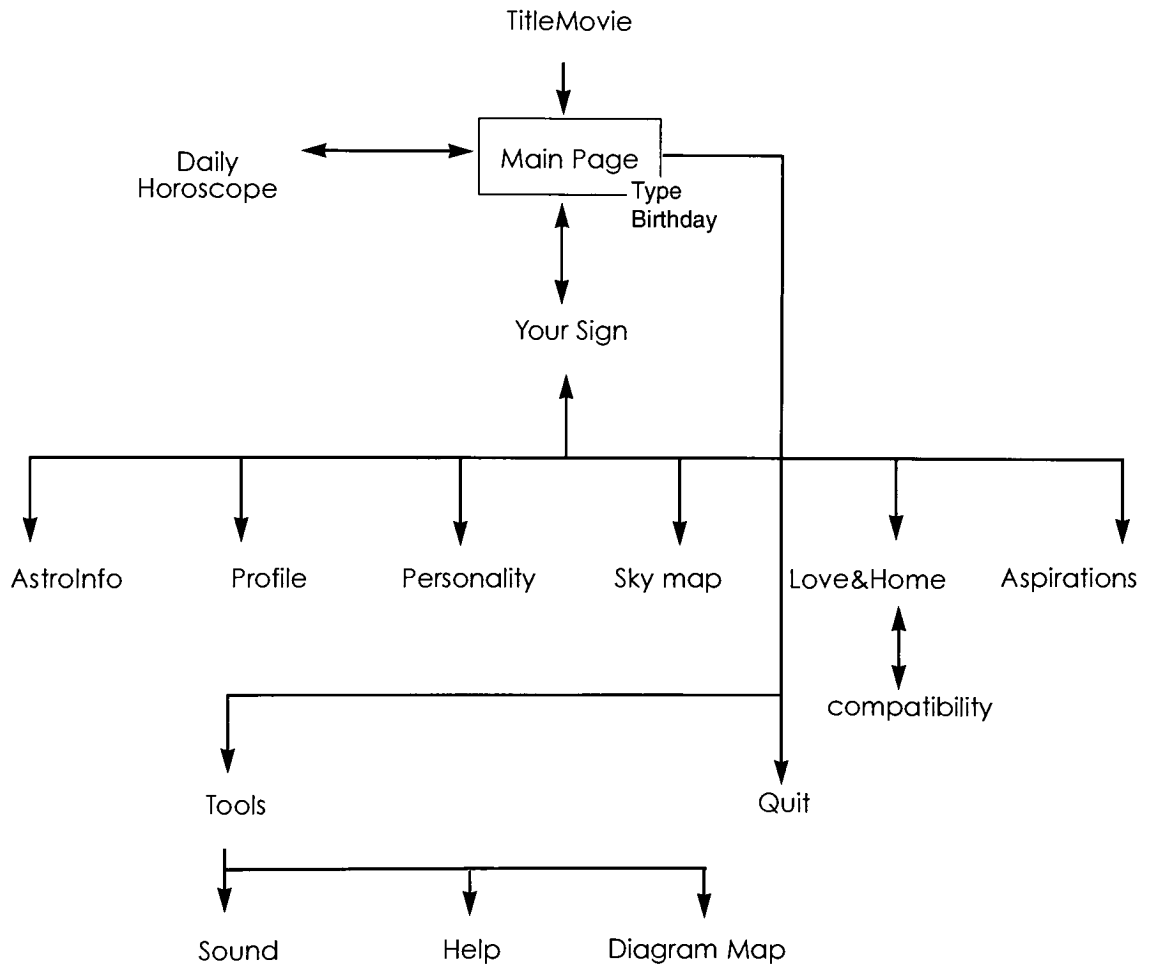
Design Layout

When laying out a design with a number of elements, I used an invisible grid to determine the positions of tiles, text, and illustrations. The use of a grid yields a consistency and proportionality to the overall design. In addition, I considered that some cuing become part of the user's cognitive model of system. There are some number of visual attributes that I used for cuing like icons, color, shape and size. Graphic cues such as rollover and highlight are consistently applied to indicate the relationships among controls.

Navigation

Helping the user use the display of "*The Birth Sign Library*" more effectively, I employed a positional constancy structured map which is a principle of screen layout whereby the same information, a status indicator, a particular menu, or a certain window always appears in the same screen location throughout this program. The viewer is thus able to link spatial location.

Navigation Blueprint

Here is a template of how the user can navigate around the title.

TitleMovie

Main Page

Daily
Horoscope

Type
Birthday

Your Sign

AstroInfo   Profile   Personality   Sky map   Love&Home   Aspirations

compatibility

Tools   Quit

Sound   Help   Diagram Map

An icon is a graphic symbol presenting some object or action, and it has been used as command language.

The main screen of the *Birth Sign Library* is a Zodiac sign clock— every object represents a 12 sign symbol. Users can feel free to click one of them and it will take them to the next page where a star shape appears. There are six angles of the star. Each triangle button contained an icon on it indicating a different direction to go.

Here are the six icons:

Red book:

This book opens to tell you about the information of each sign.

Telescope:

 The map of sky stars is revealed by looking through it.

Treasure box:

Opening this box will reveal the career and aspiration of each sign.

Magic Mirror:

This Mirror will show the profile of each sign including face, body, health, and so on.

Lamp:

The lamp leads you to the pages which tells your relation ships and love life.

Magnifying glass:

The icon indicates that to discover and find your personality and behaviors.

When not rollover

When rollover, the button highlights

The six icons offer a very compact, understandable, and visually interesting format for displaying information on the screen. They stand for "Astroinfo", "Sky Map", "Aspirations", "profile", "love&home", and "personality" respectively. The purpose of these icons is to relate the compact graphic symbol to an underlying concept. The project throughout is to interact with its operator and allow users to explore the visual image rather than only labeled text. For example, I also used color difference to highlight the triangle button when it was clicked. The advantage is that the user can develop an immediate response of the display which can lead him rapidly to specific information.

The graphical interface encourages exploration and offers many ways into the Zodiac's sign of information.

Setting the Type

Kebel
Nuptial Script
University Roman
Moon Shine

Another step was to begin setting type, to find a look that worked with graphics. I used a variety of typefaces, such as **Kebel**, **Nuptial Script**, **University Roman, and Moon Shine**. These are classic typefaces with elegant letter forms for particular words. They seemed to look more elegant and distinctive when they were condensed and then spaced out. **Nuptial Script** was a sophisticated typeface and it appeared to the feeling of classicism that I was trying to create. It was not so formal, yet not too contemporary. It gives users the feeling of a mysterious visual phenomenon.

Typeface

The fonts in this project convey a certain tone or mood to a text (**Nuptial Script** font would be a classic look for each page's banner). They were used as a source of aesthetic variation, and for calling attention or differentiating certain information. But I have to consider the ease of readability. By observing, you can notice I only applied these script fonts in each title of this program. The article text has appropriate fonts and size that allow users to read it with ease.

Article Research

After planning each screen, my next task was to research the article's text. I had to present all the key information while keeping the articles short enough to allow space for screen images. Meanwhile I switched from paper to the computer screen to create the graphics, sound, and animation.

Graphic Design

Superb graphics is one of the keys to multimedia's appeal, and we designers should be aware that the first impression of a title depends largely on the visual impact it makes.

3-D Graphics

The telescope, book, mirror, and lamp shown on Page 12 were all built as 3-d models. I added wood, brass, and ivory surfaces to the models.

2-D Image Manipulation

The background came from pictures and photographs. The first step in image manipulation is to improve the quality of scanned image. I used Adobe Photoshop to resize and retouch the picture, applying some filters, adding highlights and shadows to make it blend into its surroundings. I also adjusted the brightness, contrast, and color balance.

The montage background is made up of many layers, one for each image. The background layer sits behind the others. By adjusting the opacity of each layer, the image can have a visual effect of ambiguity and overlaying. When users navigate the program, they will have a feeling of searching and therefore are surprised when seeing some images show up from the background.

Adjusting opacity

Layers
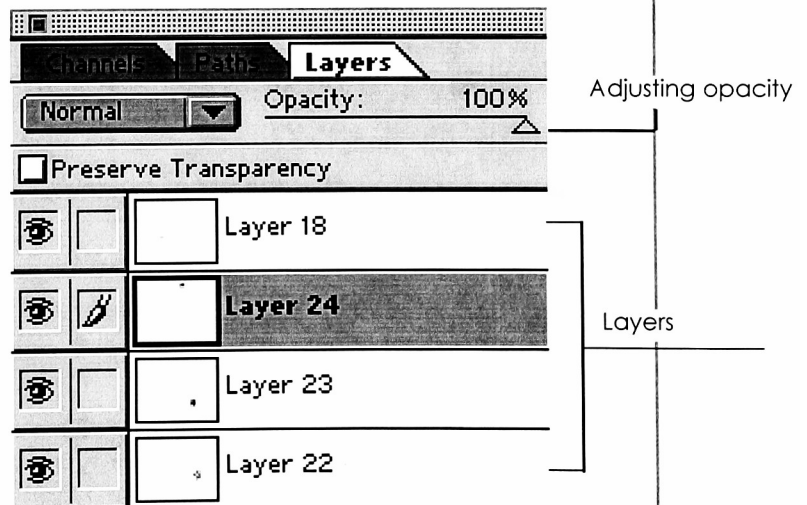
TECHNICAL DESIGN

Sound

Sometimes, sound fills a space that text and image cannot. The richness of sound is part of the vitality of the program and its growth. Throughout the project, I applied sound format Audio IFF, which is the most common format in using Director.

Decision About Sampling and Resolution

I had to make decisions about sound parameters such as sampling rate, bit resolution, and number of channels(mono vs. stereo). Common rates are 5khz, 8khz, 22khz, and 44khz. Khz stands for kilohertz or thousands of variations(samples) per second. The higher the sampling rate, the higher the quality of the sound. Higher sampling rates also mean bigger file size and consequently longer transmission times over the program.

I used lower sound quality. This was for two reasons -- first, because lower sampling sound will take up less room on CD-ROM, and second, playing high quality sound slows the computer down. Therefore, I use the 8-bit and mono sound so

it will process and playback faster.

Sound Effect

After the sound is digitized, I can still improve it. There are sound editing and manipulation programs that enable me to adjust sounds in ways beyond the characteristics of the sound itself.

As you can see, there are important design decisions involved in successfully incorporating music and sound into the program. But I must carefully consider the purpose behind adding sound: why is sound appropriate? Could text serve just as well? Because sometimes improper sound could also interfere with your project. For example, in"*The Birth Sign Library*" project, except for the background music, I also added sound effects to clicking buttons and rollovers. At first, I used looped sound for rollovers. However, I found it interfered with the background music, so the users might feel annoyed by sound from two sources. Thus, I decided to make the sound loop once. But it still can appeal to the users' attention.

Video

When working with video, I took on a significant challenge. I must juggle image, sound, motion, and time. The audience has expectations shaped by years of television and movie watching. My video must outstand the former, so it will grab the users' attention.

Modeling In 3D

Before I start my project, I wondered whether to use 3-D objects in my project or not. After viewing some multimedia programs, I noticed that programs combined with well-designed 3-D objects can enrich the interface and also inspire the users's attention. So I decided to make 3-D objects a part of my thesis project. Once I was satisfied with the model, surfaces, and lighting, the whole scene is rendered using the best method of all - ray tracing.

Ray tracing retraces the exact path of every single ray of light that hits the camera, following each one in turn as it bounces off the surfaces of the object. As result, the final image is highly detailed and very realistic, but this can take a desktop computer days to produce.

Creating Small Animations

When people navigate through *The Birth Sign Library*", they won't feel bored because I created some small animations that loop for most of the screens to keep their attraction on each title providing visual dynamics that are more intriguing than just a still image.

SOFTWARE AND EQUIPMENT

SoundEdit

I recorded music for various titles, as well as a voice-over for animation, and sound effects to accompany the progress through the title. Most of the work was in editing and mixing digital sound files. I brought sound files into SoundEdit for editing. I applied some effects like amplify, tempo, and echo to adjust it to the sound I want.

Adobe After Effects

I used After Effects to produce the animation for the intro-movie. It is an application that combines techniques of 2D-animation with computer image manipulation and 3D graphics. The benefits of this program is that it supports Photoshop layers. So I can edit its effects and motion path with ease after importing the file from Photoshop.

Director

Multimedia is created by incorporating all the different elements – sound effects, text passages, video clips and so on – into one program, and then defining how the user can inter-act with them. This process is known as authoring. Many authoring programs, such as Macromedia Director, use the

analogy of directing a movie or a play to simplify the process.

Adobe Photoshop

With image manipulation software like Photoshop, I can use cameralike filters and all the tricks of a photographic dark-room to transform the original images into something totally new.

Alias Wavefront

3-D modeling software like Alias|Wavefront can create an imaginary three-dimensional space for the designer. In Alias, every object in the given space is represented as set of points, which are joined to make an outline framework of the 3-D objects. This is known as a wire frame. I created a 3-D temple animation for the intro-movie. The purpose in doing this is to immerse users in an artificial 3-D scene when they first visit my project. It also gives an idea to users that they are entering a library where the interface took place.

Creating an alternative reality is not as difficult as it seems. Even so, sometimes it takes a while for me, who is used to flat images, to become accustomed to working in three dimensions – in fact, once you are familiar with the tools in a 3-D program, you will have a better sense of spatial visual-ization. Imagination is allowed free rein. For me, the software used to make 3-D models is powerful enough to turn almost anything I can think of into a tangible artificial reality.

Equipment

- Power Machintosh 7100/80

- 750MB internal hard drive 72MB RAM

- 15" Monitor

- 230MB MO drive

- 2GB APS external hard drive

- UMAX S-6E Scanner

- Silicon Graphics Incorporated / Solid Impact Indigo II

Point and Click

wait

point & click

touch & rollover

The single most useful tool for the multimedia user is the mouse and its on-screen pointer, or cursor. In most multimedia titles a small pointer icon on the screen -- most often in the shape of a hand or an arrow -- follows the movement of the mouse. Choices are presented on-screen as words or pictures. Pointers take several forms within the program. Different pointer shapes are used to indicate, for example, when the pointer is over a hotspot, or when the program is pausing to load new data. This gives the user important feedback about his or her actions.

Hot Spot

A hot spot is usually an area that reacts when you select it, by taking you to another part of the title. In my project, some hot spots are visible and clear, however, some are invisible: they are revealed only by exploring the screen with the pointer and observing where the pointer changes shape. Another type of hotspot is hot text -- a word or phrase that appears on-screen in a different color from the main text to show that it is

live or active.

Authoring Multimedia

While the resources were being prepared, I began creating the final screens. To do this, I used Director which enabled me to lay out the image, compose the graphics and text for every screen, and add hotspots and interactive links all at the same time.

Adding Interactivity

To make a sequence of multimedia interactive, I had to add controls for the user and instructions that tell the program how to respond. The designer adds control by defining certain areas of the screen as on-screen buttons, or hotspots. The next step is to attach a set of instructions (-a script-) to the hotspot. When the hotspot is activated, the script will initiate the responses. I also applied the proper transition from one page to another, so it makes navigation smooth between screens.

Lingo

Macromedia Director is the application of choice for professional multimedia developers. In order to produce truly interactive movies, I had to construct the interface as well as use Lingo commands to construct the whole program and make the interface more attractive and active .

The final work involved repeatedly testing and fine-tuning the entire project.

RESULTS

Problems Encountered

Problems Solved

User-testing and Feedback

PROBLEM ENCOUNTERED

My program includes high quality multimedia such as high resolution images, sound, and digital video. High quality media files tend to be very large. Users can become frustrated with the realities of slow transmission times. Compared with the hard disks, CD-ROM drives are slow at transferring data from the disc to the processor. It is especially noticeable with video, which often looks jerky, or can only be displayed in a tiny window, although new video compression techniques have reduced the amount of data needed to produce good-quality, full-screen video sequences.

As result, we must make compression in media quality (for example, reducing the length, frame size, or rate of the video). The only way to achieve an acceptable level of playback is to compress video files down to a practical size.

Text and Type

Static text: The text in Birth Sign Library is built into the graphics rather than being stored as a text file. This enables it to be well laid out and easy to read. Static text are designed to look their best on screen and laid out to fit in well with their graphical surroundings. But it has one major drawback:

design considerations are paramount, and the text is always limited to a single screen.

If the text is being created from scratch, it is usually written in short, self-contained chunks. This is because most people do not like to read large amounts of text from a screen.

PROBLEMS SOLVED

How to Make a Good Animation

When working with the intro-animation for "The Birth Sign Library", I experimented and composed with some elements like images, movies, and sound constantly. Sometimes it was not so easy to have the result I want, but here is the gain of learning from my experiences:

• In 3-D animation, lighting should be sufficient and articulate with design purposes.

• Editing should be tight. Continuity in time should be matched carefully to aesthetic or communication purposes.

• Shots should be carefully composed with important subjects prominent and unnecessary visual material excluded.

Sound Files

In "The Birth Sign Library", a lot of sound is included. While sound quality is critical to a Director production, it also directly impacts the performance of the project.

I have to minimize the size of sound files to have better playback performance. Take steps to minimize file sizes by cutting out silences and other extraneous sounds, sampling at

lower rate, and using bit resolution that preserves the quality of sound.

Video Compression

I built many movies in the project. It is needless to say that the movies not only take a lot of storage space but also result in slow playback. Without compression there would only be enough space on a CD-ROM for approximately 20 seconds of broadcast-quality video. Furthermore, the speed at which an average CD-ROM drive transfers data means it would take about three seconds to display each frame. The only way to achieve an acceptable level of playback is to compress video files down to a practical size.

I chose "Cinepak compressor" when compressing 16-bit video for playback from CD-ROM discs or for desktop presentations. For best results, use the Cinepak compressor on raw source data that has not been previously compressed with a highly lossy compressor.

The last thing to do is to test my project on various computers to check if the movie played properly or not

How to Save memory

There are a lot of large graphics in my project. I have some tips for saving memory and improving performance when creating large images. It is better to animate sprites on top of a single, large background than over a background made up of multiple

overlapping sprites. I always have a large background image that is used throughout my project, so it can be stored in a Shared Cast movie.

Second, I dither cast members to a bit depth of 8-bit, 256 colors or less. These graphics will perform better than higher resolution images and are adequate quality for most purposes. Also, for widely distributed productions, 8-bit, 256 colors is the standard for most personal computers.

Debug Lingo Scripts

I used the message window to test Lingo scripts; type a command and then press the Return key to execute it immediately. I also selected the Trace checkbox in the Message window to follow scripts as they were executed during play back.

U S E R - T E S T I N G   A N D   F E E D B A C K

Before the project was really finished, I did some user-testing and gathered some feedback. Knowing the users' opinions can make the program more friendly and understandable. The following paragraphs are most users' feedback about my project.

The program begins with a brief animation showing the title and the subject, then goes into the main menu which has one Zodiac clock – illustrated buttons. The main menu is a good means to present to the user his range of choices at a particular moment or for a particular action. After clicking on one of the buttons on the clock, users go into different branch structures. Each sign figure was set against an image of faded-out background distinguished by its color and symbols. Because I put key information in prominent locations, so that users develop a spatial sense of where the data is to be found.

Within this program, the incorporation of a movie is useful because it makes a strong impression on users. Sound also has a certain advantage over graphics as a means of communicating with users. I used sound as an aid to alert the audience to inspire their desire for searching information. Moreover, the

program has proper navigation and interface design allowing users to have control whenever possible, and reinforcing the feeling of control. Such control is a teller with a button labeled "restart" or "Quit" clicked before the message appears or after it ends. All user actions will cause some visible or audible response or change in the interaction screen.

Deep branching structures can be confusing and frustrating to the user and may interfere with the information or ideas you are presenting. When designing the interface, I tried to eliminate unnecessary branching and create banners to let users know where they are and how to get where they want to go. A "Navigation Map" provided instant access to all areas of "*The Birth Sign Library*", so users can easily jump to various areas.

In addition, I created a "multiple tool button" which included all navigational controls, preferences, and settings. It is presented as a pop-out menu button when rolled over, so there won't be a lot of buttons displaying on the interface. However, there might be some weakness in the "multiple button." It creates user confusion about whether they are clicking the right buttons or not when the buttons are rotating.

In summation, the more you understand your users or potential users, the better you can shape your program.

SUMMARY

Conclusion

Recommendation

CONCLUSION

After I had finished my thesis project--**The Birth Sign Library**, I realized a fact that computer graphics designers are becoming less art directors and more responsible for every level of a project. And it seems like multimedia may hold the key to simplifying the information age. It is impossible for multimedia producers to overtake the book's educative function, but there is a fact that multimedia can reach the field that books and other media can never reach. By presenting words, sounds, pictures, animation, and video in an interactive way, it allows us to choose our own paths through information. In this respect, it is similar to the natural ways we learn as young children. When we come into this world we are beautifully programmed -- to crawl around, to touch things, to look at things, to hear things, to feel things. Those interactions with information is what multimedia offers. And because multimedia creates an environment that you can control, its potential to entertain and educate is enormous. Therefore, when navigating my thesis project, many users can become so absorbed that they lose track of time and space, lost in its surprises and delights. Also, however, sometimes lost in its frustrations and dead ends. As a computer graphics designer, I felt this is my resposi-

bility to shape this innovative and powerful medium well. But I also need to broaden my horizon beyond the multimedia to understand the trends shaping its future and the ways it fits in the larger society.

RECOMMENDATIONS

Before creating a multimedia project, I would recommend designers take the following issues into consideration in order to create the right impression and responses:

- who is your audience?
- what is the visual appeal of the program?
- what do visitors notice first?
- How do text and images work together?
- How effectively do the displays communicate?

After they have done their project, they need to think about the following questions as part of the expanded design process:

- How should choices link together into various paths?
- What choices should lead to what other information?
- What text or images should be used?
- What navigational aids should be offered to users so they don't get lost?

I also have some recommendations for how to create an effective interface design. Historically, design has focused on visual design-making decision in form, line, color, and layout that enhance the appeal and communication of one's creations. Interactive designers, however, are beginning to develop some guidelines about ways to create visually appealing and effective programs.

Create a coherent, consistent layout style. Notice that magazine issues differ from each other but usually are consistent within. These styles help audiences efficiently scan the information. These style choices cover such aspects as header, paragraph, and indentation styles, placement of images, banners, and other repeating elements.

Create an overall "look". Strive to create a consistent style for repeating inline images in a program, such as icons used for navigation. Build that similarity by choice of images type, color, and drawing style. These visually unify pages and can function as reassuring landmarks.

APPENDIX

Screen prints
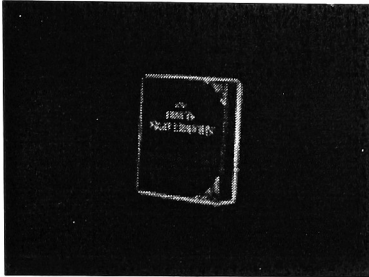
A book flying out from dark
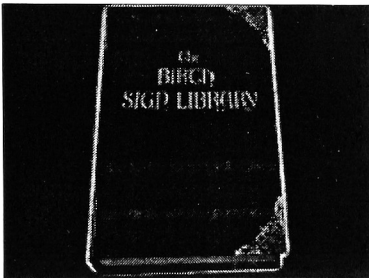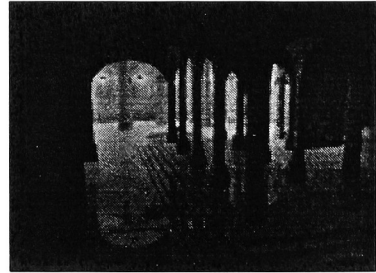
The title shows on a book
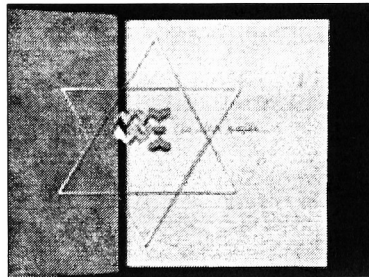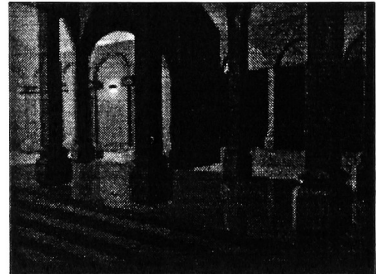
Each symbol shows up one by one
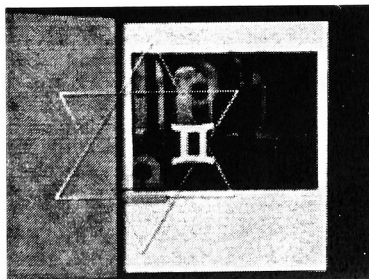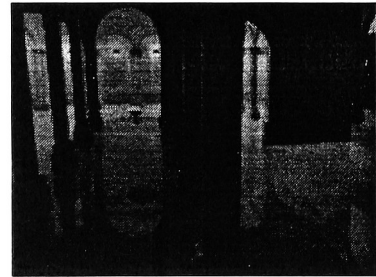
Temple animation playbacked in the book
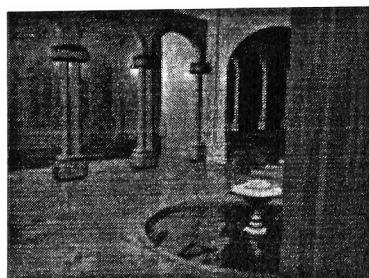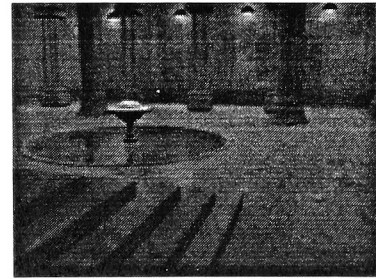
A series of temple scenes leads viewer into "The Birth Sign Library"
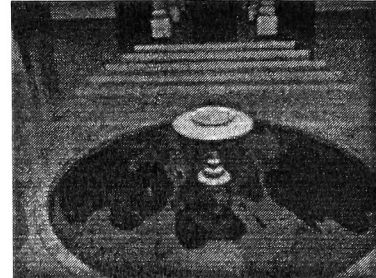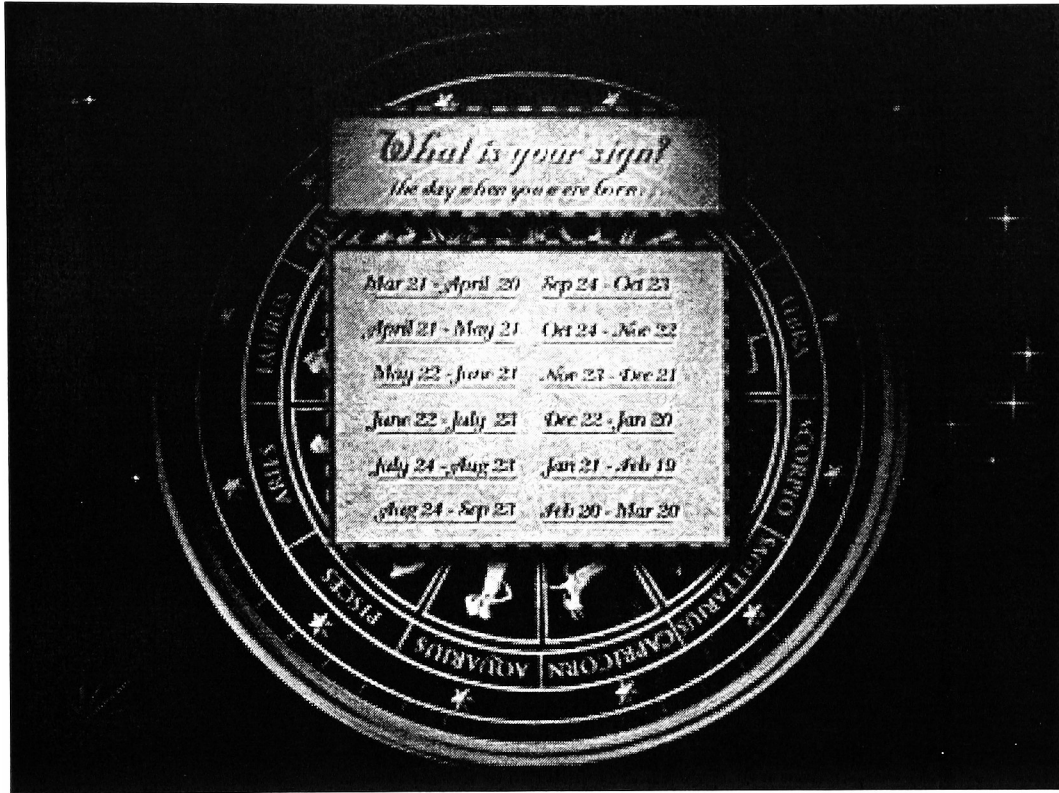
Asking users' Birthday and define their signs

Zodiac Clock

Rollover Button
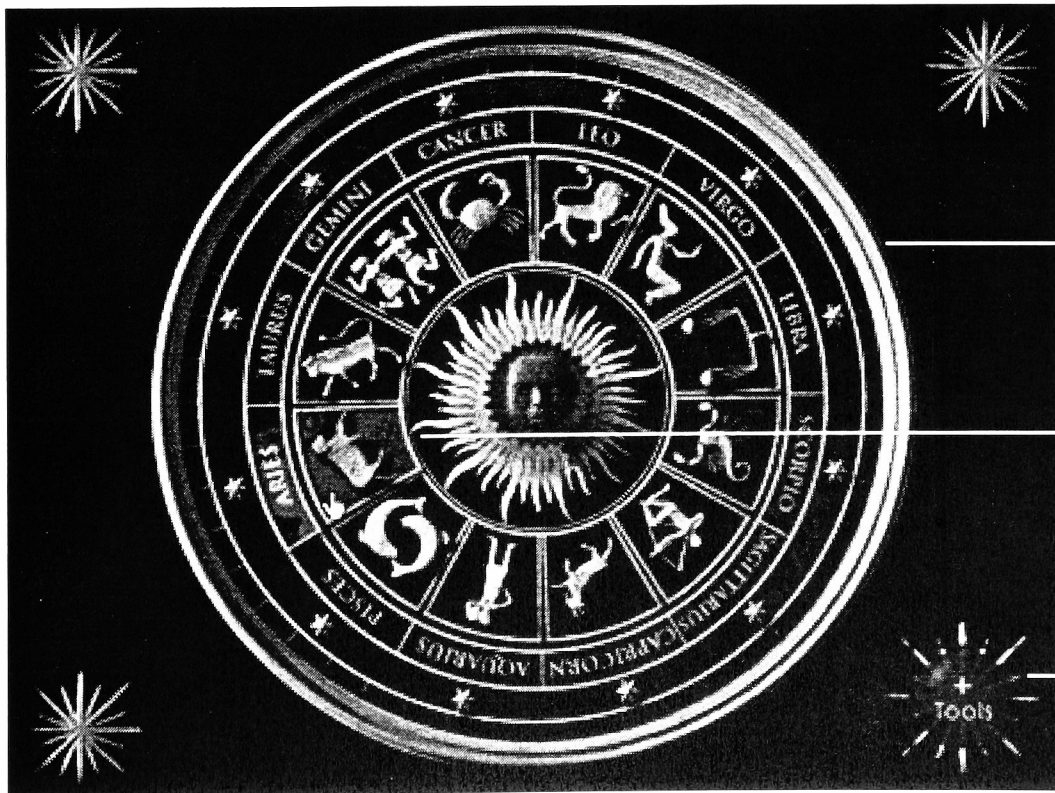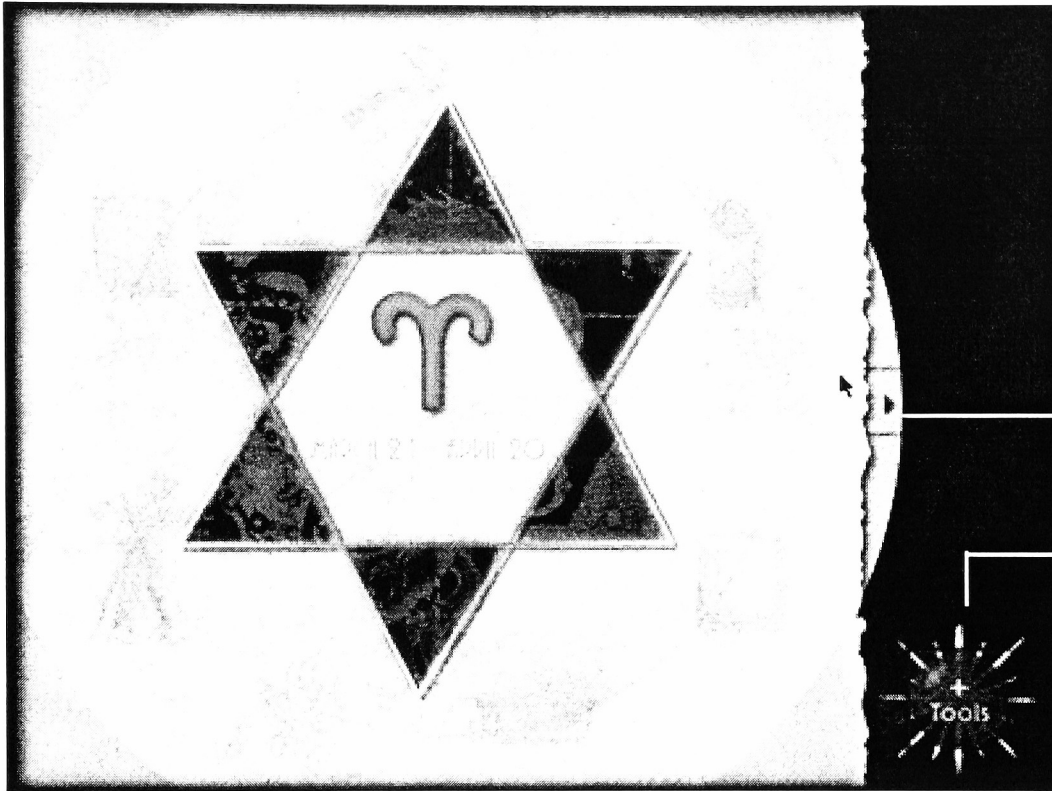
Multiple Button

Pop up button
Take you to
"Dailyscope"

Multiple Buttons

Tools
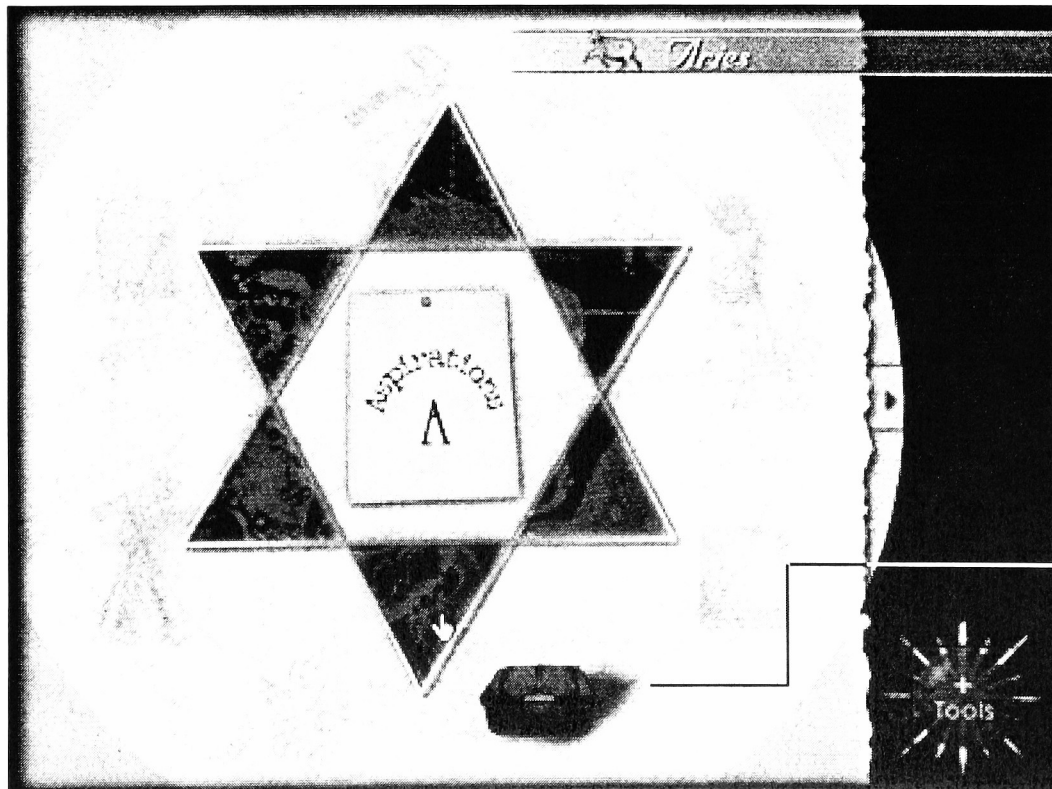
There are six
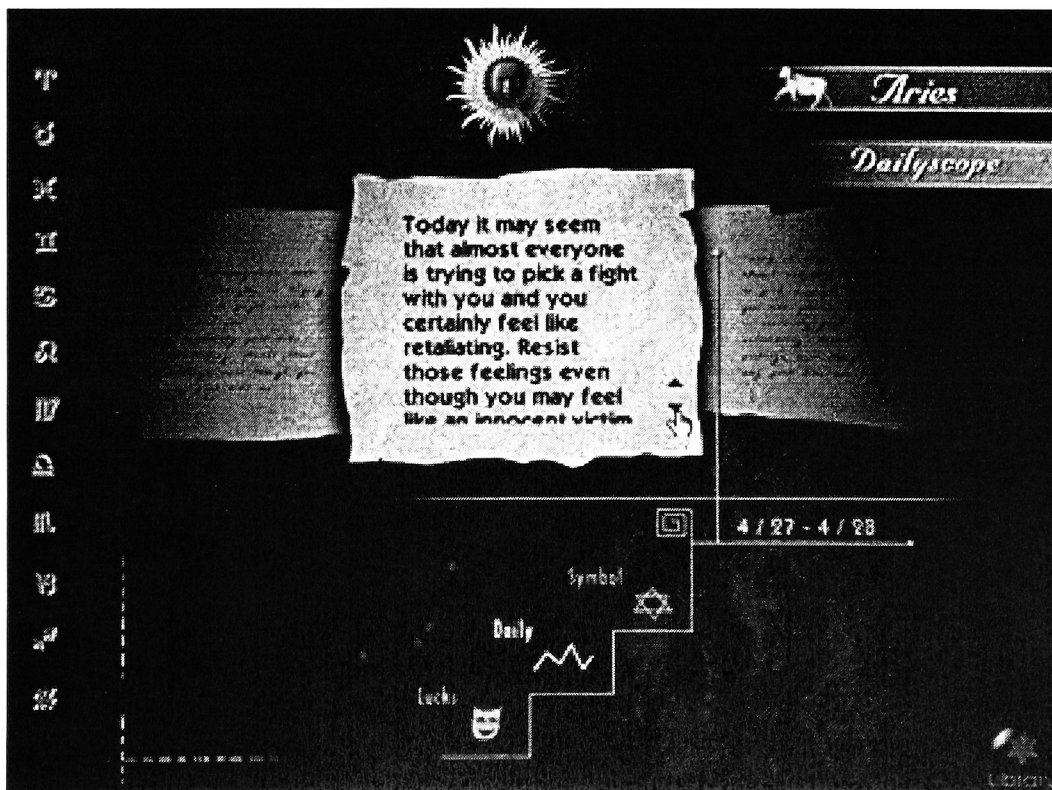buttons going
to different
divisions

Tools
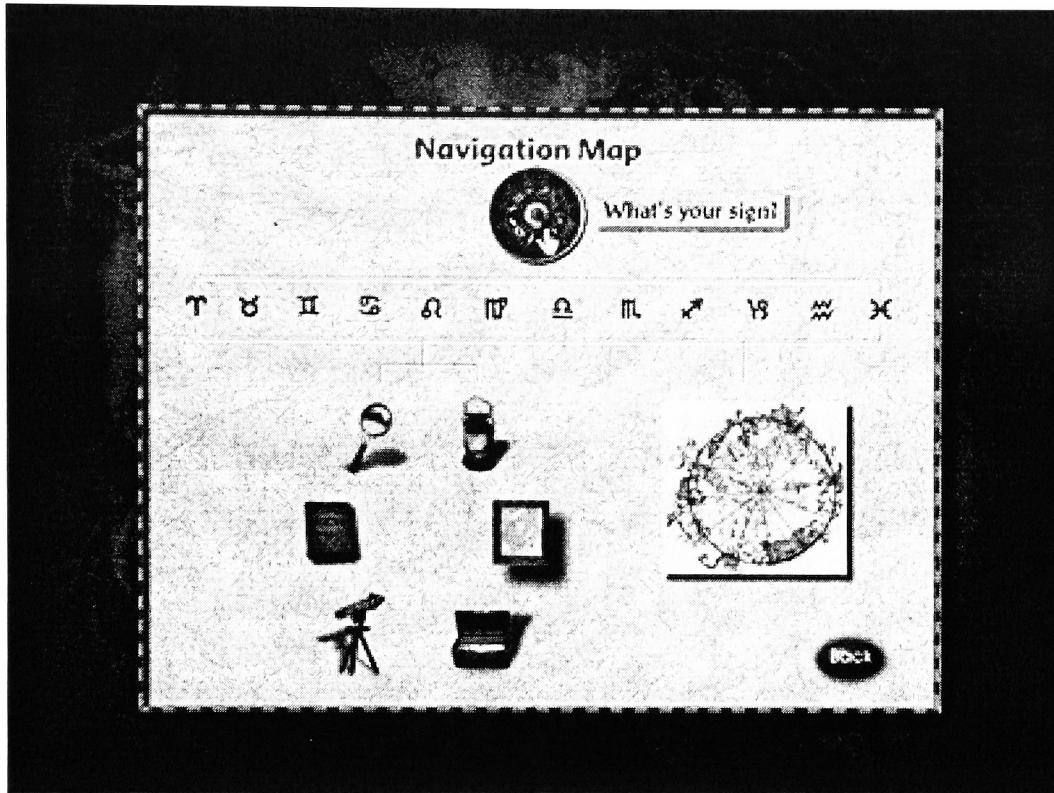
The Navigation Map

Help Page

Click the stars to see daily horoscope

back

Click the stars to see daily horoscope

Main

Aries

Dailyscope

Today it may seem that almost everyone is trying to pick a fight with you and you certainly feel like retaliating. Resist those feelings even though you may feel like an innocent victim.

4 / 27 - 4 / 28

Symbol

Daily

Lucky
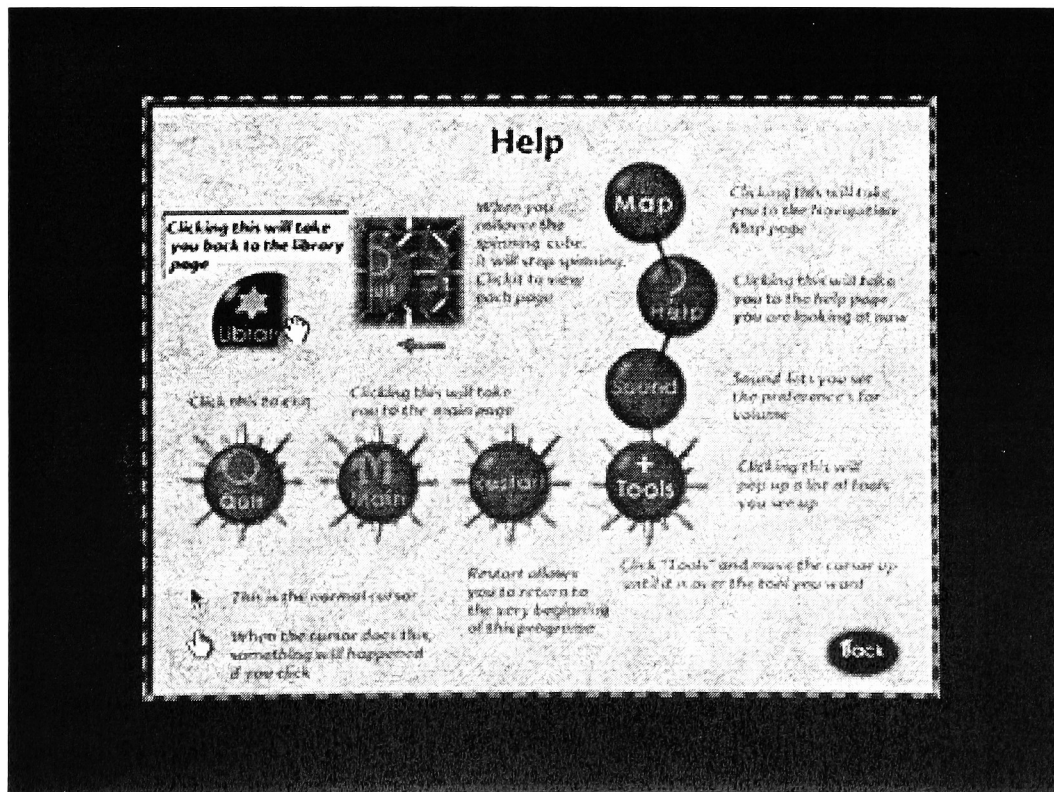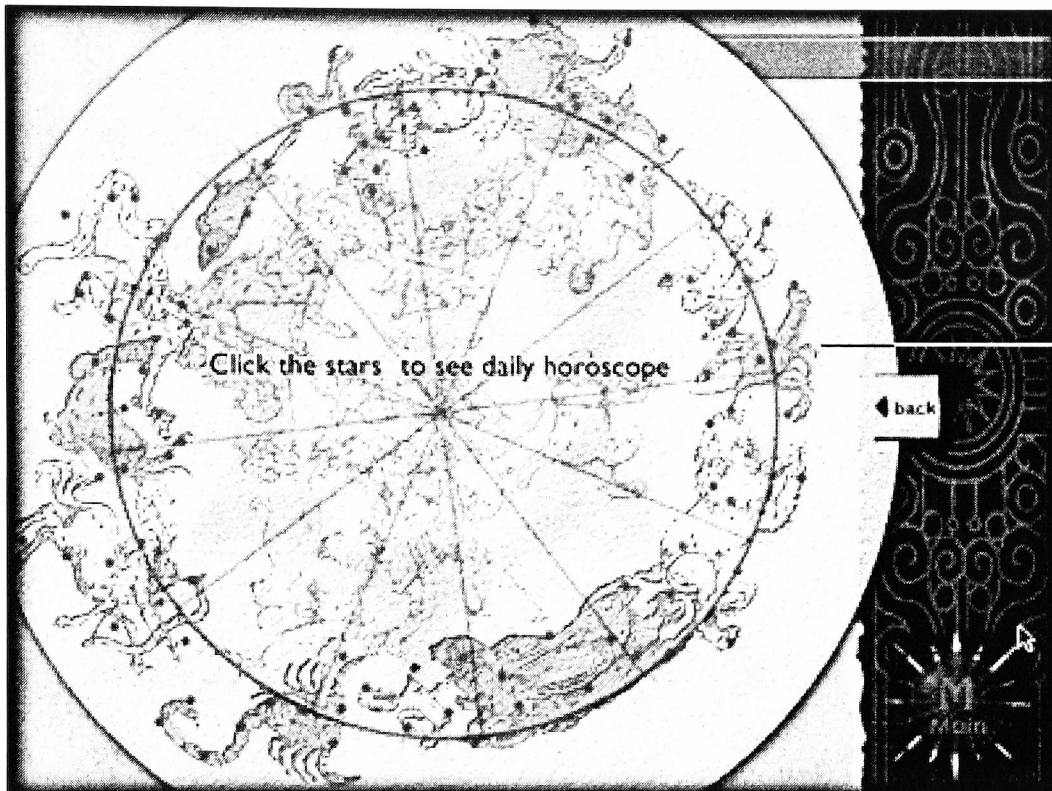
Each sign's daily horoscope
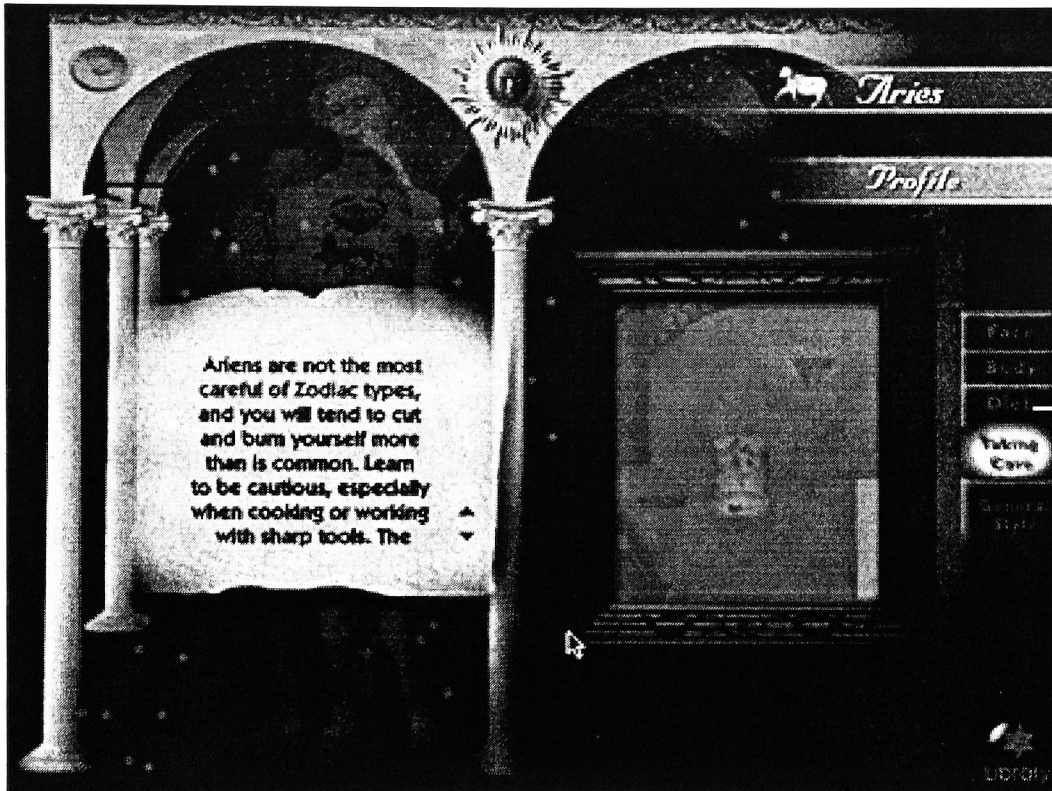
Face

Body

Diet

Taking care

General Sty
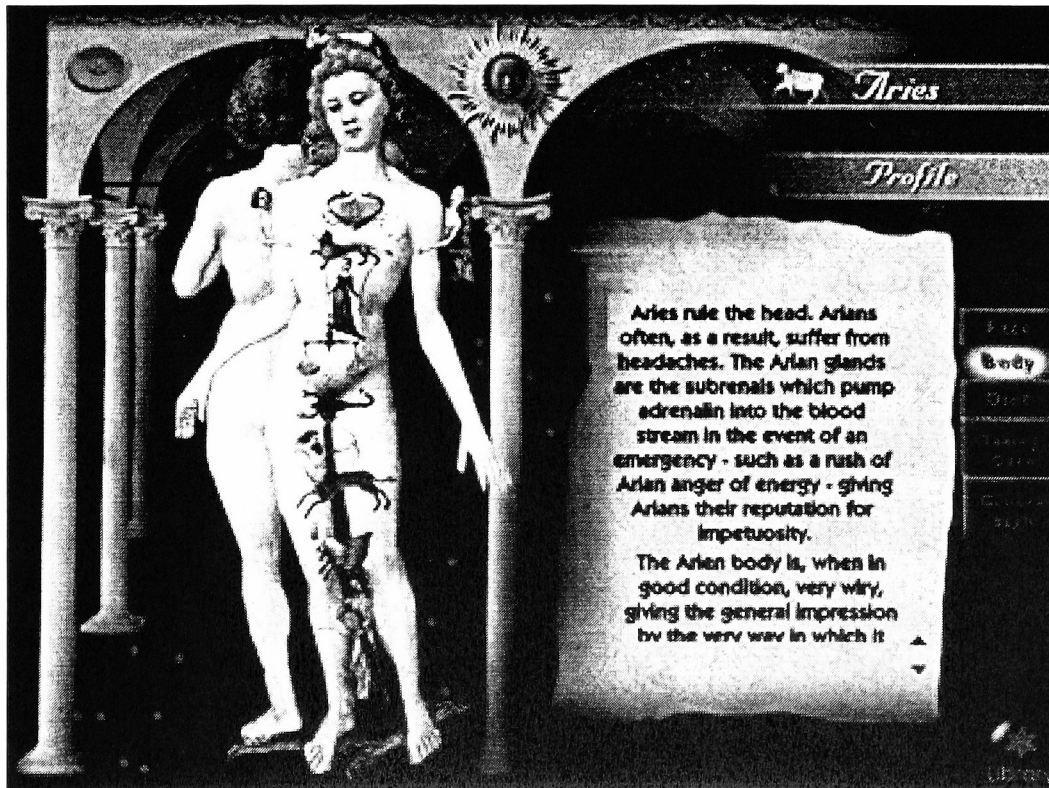
Home

Love
Compatibility

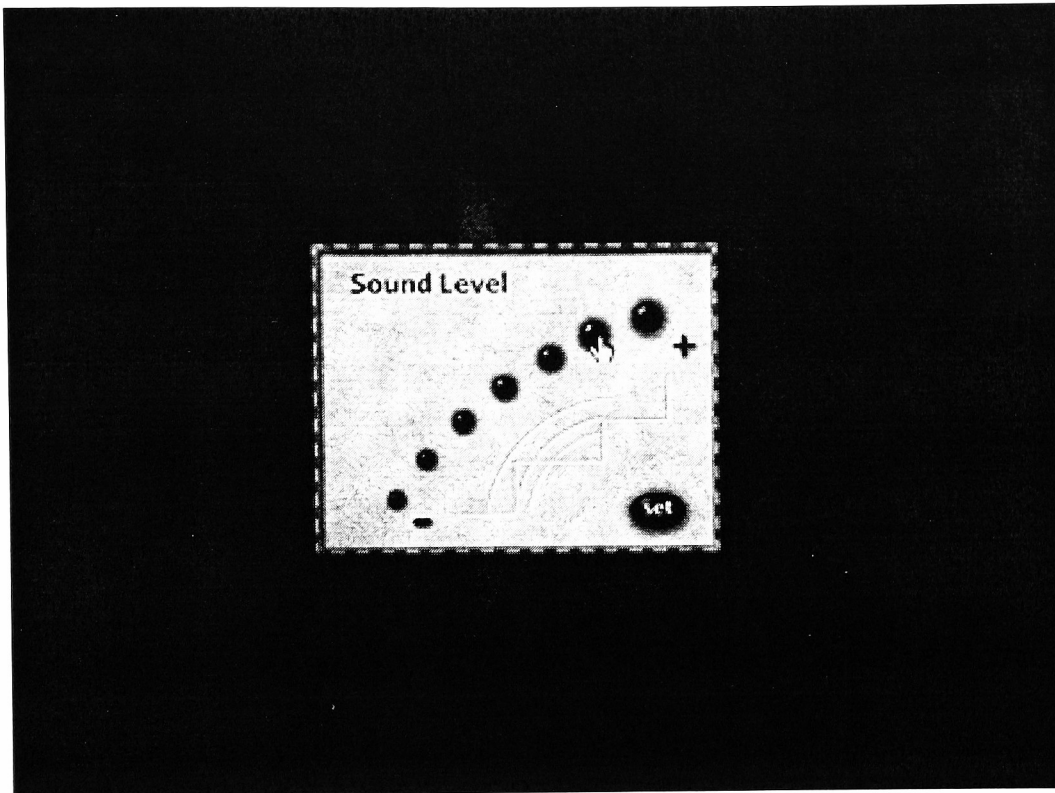Navigation
button
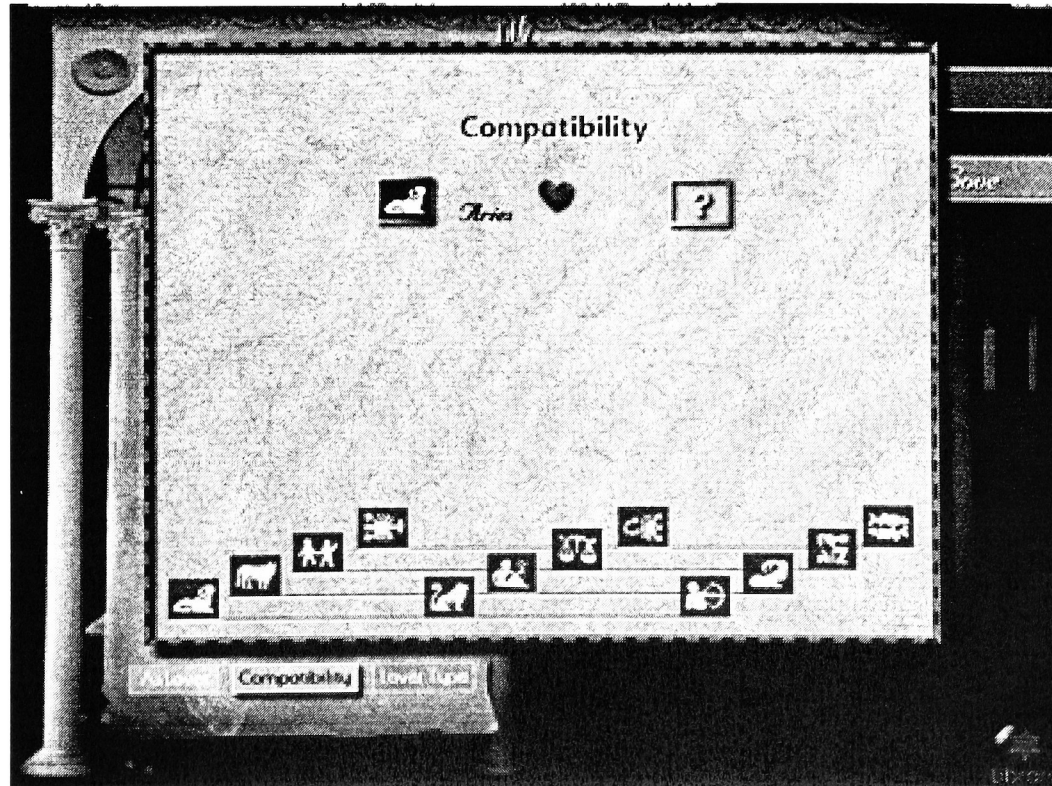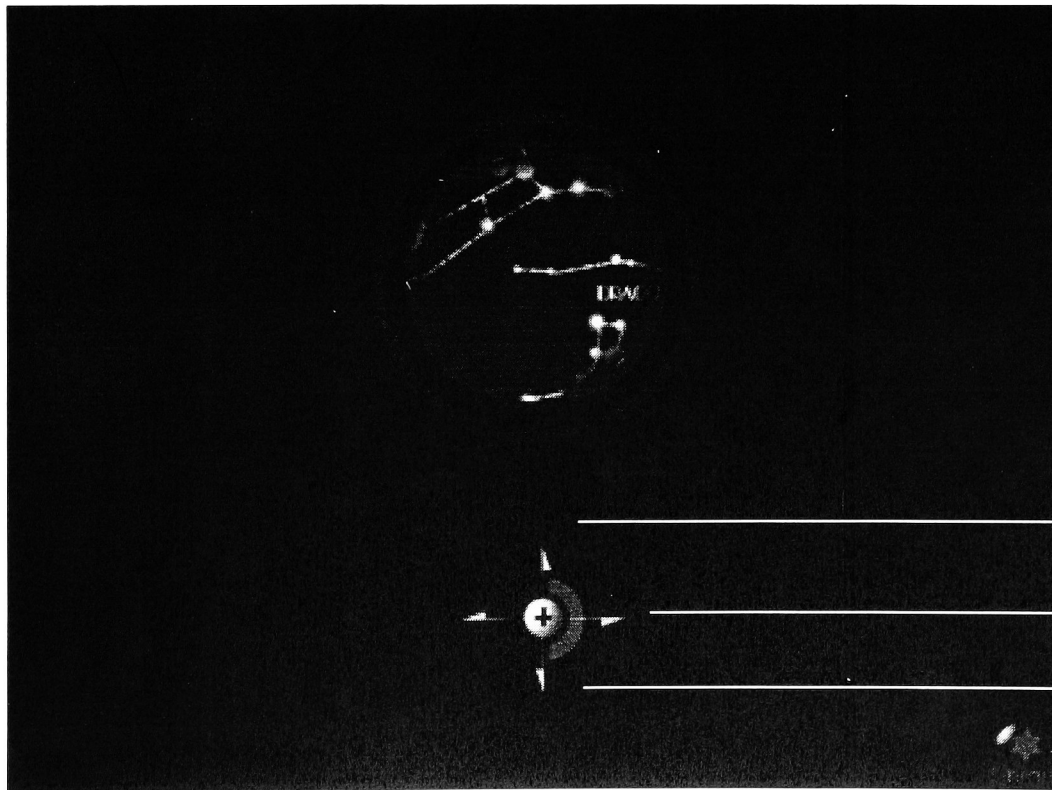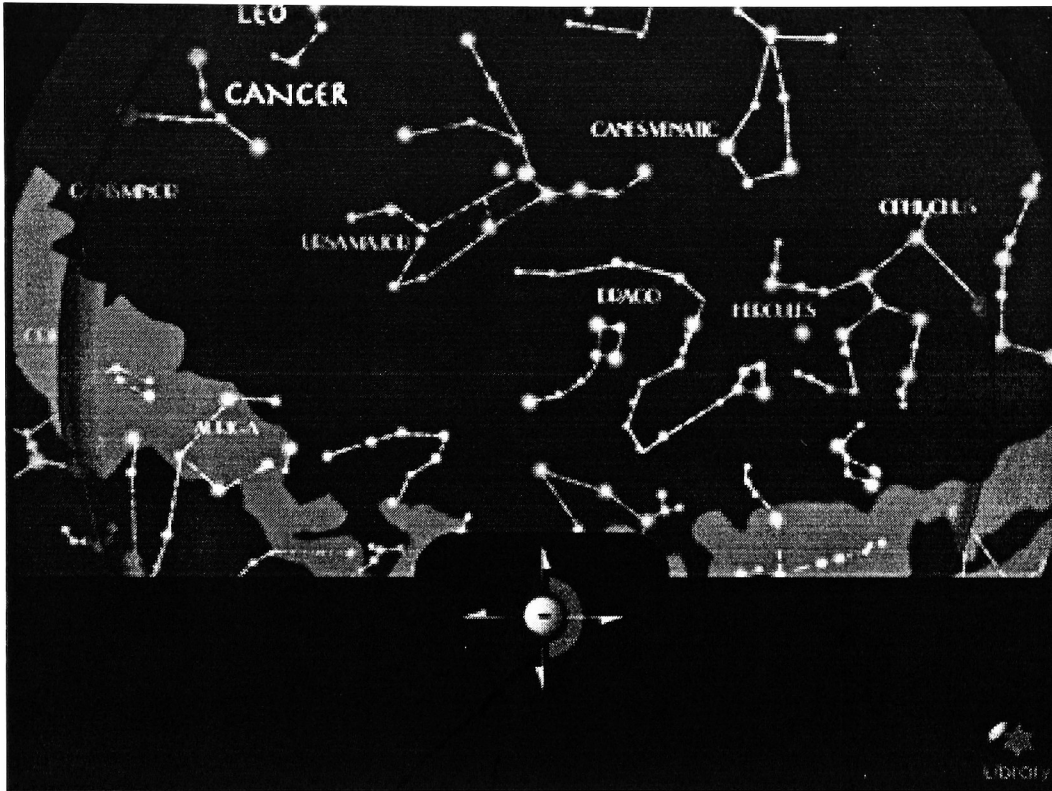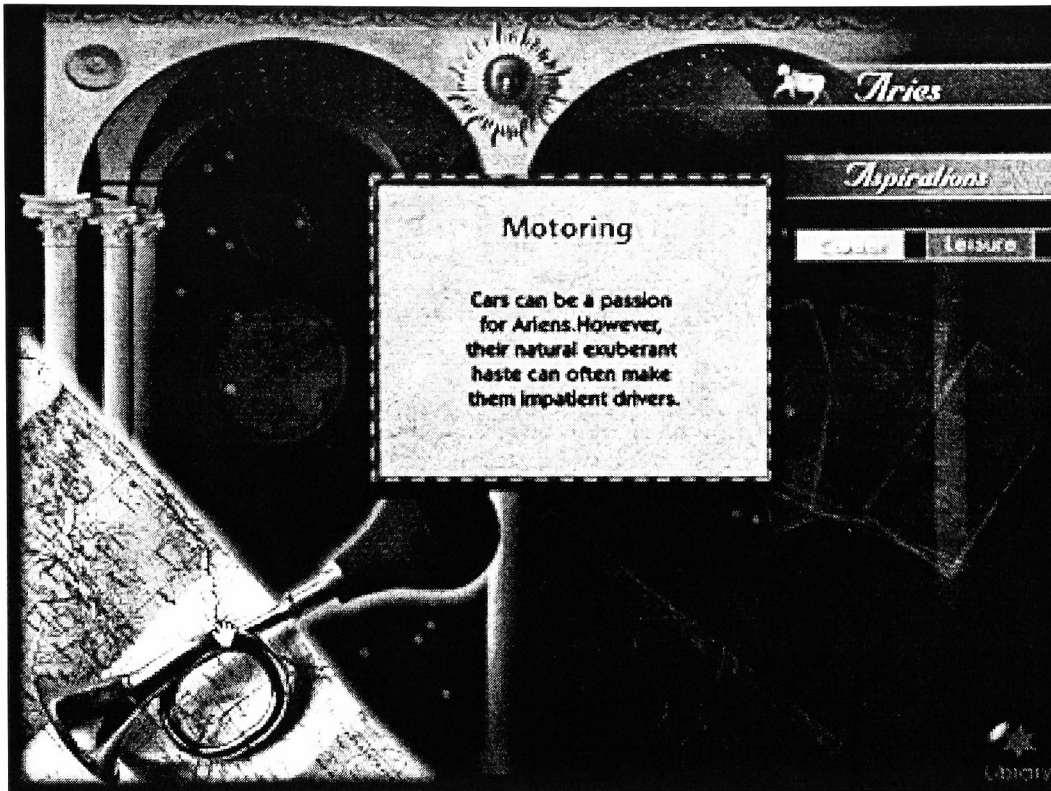
Aspirations

Personality

Sound
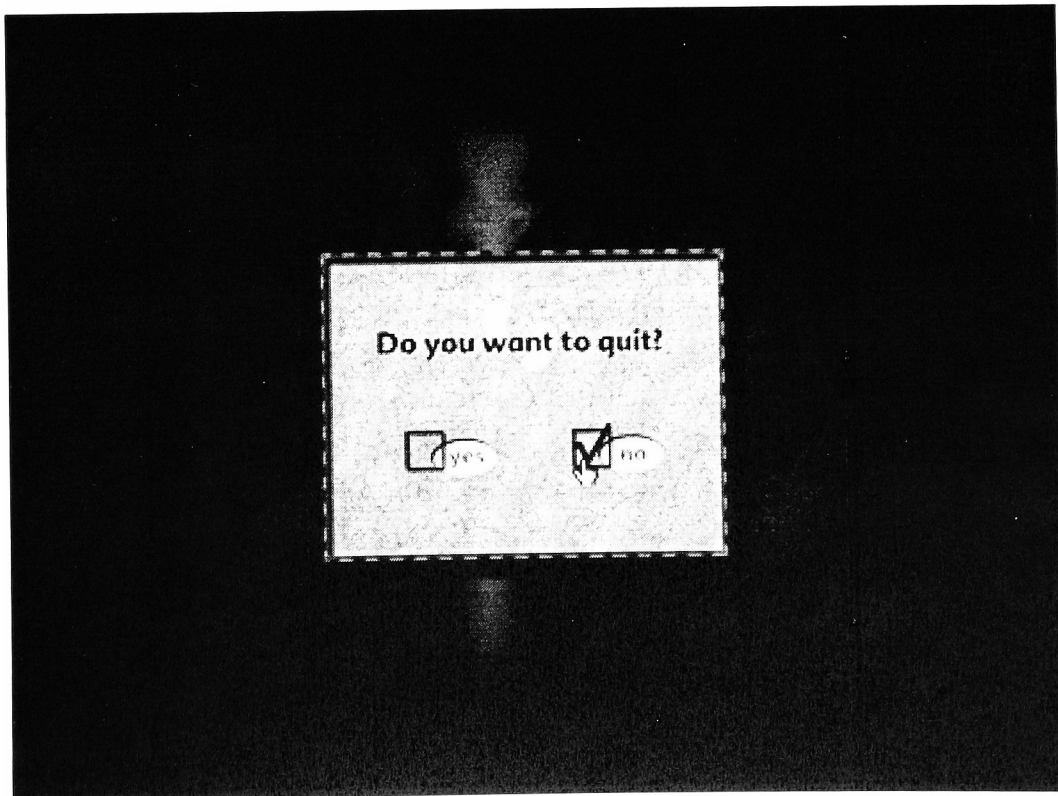
Quit

B I B L I O G R A P H Y

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