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Bravo Course Outline

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XEROX

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Preface

The Outline is designed as a self-teaching aid for new Bravo users. It is written in three parts, progressing from introductory level information to Bravo's more complex editing/formatting features. Part I provides sufficient information for a user to prepare memoranda and letters with Bravo, and to format them with preset formatting options. Part II describes Bravo's more complex formatting options. Part III describes remaining Bravo features and references further documentation.

Bravo was designed by Butler Lampson and Charles Simonyi, and implemented largely by Tom Malloy, with substantial contributions from Carol Hankins, Greg Kusnick, Kate Rosenbloom and Bob Shur.

Several people contributed their time and energy to read and comment on the outline. They are: Richard Sweet, Betty Burr, Diana Merry. Their contributions are much appreciated by the author, as, if known in detail, they would surely be by the reader. And, while acknowledgements are the topic, PARC's secretarial staff is heartily acknowledged for providing a great deal of support and gracious assistance to new, non-technical users of Bravo, and for supplying them with some of the folklore surrounding experimental systems.

Note to the March 1978 reprinting:

This reprinting includes a very mild updating of the original version of the Outline. The purpose of the updating was to make this outline more compatible with the version of Bravo currently released to most users of the system--Bravo 7.1 released February 27, 1978. As you might imagine, there is no perfectly up-to-date outline describing any evolving system--true, here too, with Bravo. If you are having trouble with a feature described herein, locate a daily user who will surely share with you the current folklore...Bravely, JKFarness

Introduction

This course in Bravo is separated into three Parts. Part I contains introductory material and is designed to be used in conjunction with Exercises 1 through 8, which are printed separately and should be obtained before beginning Part I.

The course may be discontinued after Part I if user needs are satisfied. Part II contains a number of formatting options, many of which are necessary if Bravo is to be used for technical reports requiring precise formatting and special characters (Greek and math symbols, for example). Part III describes the remainder of Bravo's features.

A Summary of Commands is given at the end of the document. The keyboard and/or mouse sequence for each command is listed, followed by the page number where further explanation can be found within the outline. Since the command summary is presented in dictionary form, it can be used either as a ready reference, or as a partial index for the outline.

For new users the outline may serve as a course in Bravo, and the user should start at page 1. For established Bravo users, the Summary of Commands may be the most interesting section. For those who know Bravo, but are using a feature for the first time, the description of that feature can be located quickly by referring to the command summary/index or to the table of contents.

New Users

Some effort has been made to provide sufficient explanation to make self-teaching possible. However, if a choice exists, the preferred method for learning Bravo is always time spent with an individual already competent in its use. Learning Bravo solely through the use of this Outline will be somewhat difficult and should not even be attempted until several start-up activities have been performed. Before beginning, *ask someone to assist you* in performing the following operations:

1. Have a non-programmer's disk copied (described on pages 2-3 of the *Alto User's Handbook*).
2. Have the disk installed with your Maxc (or last) name and a disk name of your choice (described on page 4 of the *Alto User's Handbook*).
3. If they are not already colored, have the mouse buttons labeled **Red**, **Yellow**, and **Blue**.
4. If they are not already marked, have the following keys on either the Alto I or Alto II keyboard labeled:

DEL
BS
ESC
CLR
LF

5. Have the following file copied onto your disk:

<Forms>Form.Memo1

DEL and BS Keys

There are two keys that will be particularly useful to a new user. They are **DEL** and **BS** (backspace). **DEL** is used to delete (abort) a command. It is quite easy to activate a command accidentally since commands in Bravo are single character commands. Striking the **DEL** key will delete the command and allow you to start again with the command intended. **BS** (backspace) is used to correct typing errors, whether they occur during a command at the Alto Executive level or while typing text in Bravo.

Exercises

The exercises which accompany Part I are a central part of the presentation. Most of the features are described as part of an exercise in which each feature is *used*. The reviews are also an important element in Part I. They are designed to reinforce material already described before introducing new material. For *new*, non-technical users of Bravo, it is *strongly* suggested that both the exercises and the reviews be performed in the order given.

Summary

An effort has been made to provide ample explanation and to forestall difficulties; however, *there will* be points of confusion and/or Bravo problems which were not foreseen. Therefore, it is a good idea to locate a Bravo user who is regularly available and willing to assist you when difficulties arise.

For the first week or two of Bravo use, it would facilitate the learning process if you were not responsible for producing actual work while learning. Use of the exercises and files suggested will provide an element of ease not to be found in work which is deadline driven; and without the pressure of others depending on you for their work, it may be possible to find elements of humor scattered throughout the learning process.

Part I

Conventions:

What the user types will appear in boldface and underlined--e.g., g _et indicates the **g _et** Command, for which the user types only **g _et**.

Examples of system messages are indented and appear in boldface.

CR =

Type a Carriage Return

ESC =

Type the Escape Key

^ =

An up arrow preceding a character indicates that the following character is a Control Character--e.g., **^b** means that the Control key is *held down while b* is typed.

Loading the Disk

On the front of the Alto there is a glass door with a handle across the top. Below the glass door on the *left* is a white switch which is labeled **Load Run**. Below the glass door on the *right* is a white **Load light** and a Yellow **Ready light**. Locate the Load/Run switch, the Load light and the Ready light.

When the white switch is on **Load**, and the white **Load light** is on, the glass door can be opened and a disk inserted. There is a *slight* resistance on the door when it is opened.

Hold the disk flat side down, with the label facing you, and slide it gently into the tray; then push it slowly back until it stops. Now close the door and push the white switch on the left to **Run**. When you do this the white **Load light** will go out. Wait about a minute until the Yellow **Ready light** comes on.

Starting (Booting) the Alto

Once the disk is loaded and the Yellow **Ready light** is on, the Alto can be booted (started).

On the back of the keyboard there is a thick black cable and a thinner black wire; in the middle of them, on the casing of the keyboard, is a "boot" (start) button. Push this button to boot the Alto.

When you boot (do it now), the screen lights up and some general information is displayed at the top of the screen: the "Alto Executive" level is identified; the date and time are given; the number of pages left on the disk, which version of the Alto Operating System (OS) is being used, the number of your Alto, your name, and the name of your disk.

Toward the middle of the screen, is a "herald" or marker for the Alto Executive. It is a greater than (>) sign. A vertical bar blinks on and off in front of it, marking the point at which any keyboard command will appear.

The Alto Executive

The Alto Executive serves as a controller for the entire Alto system. There are a number of different programs on the disk, some of which you will not use. All programs, Bravo included, are initiated from the Alto Executive level.

I. Introduction to Bravo

To access Bravo from the Alto Executive, type:

>BravoCR (CR__ means type a carriage return, not the letters CR)

Before beginning any operation, notice what the screen looks like, how Bravo displays itself and what information it initially gives the user.

A. Bravo's System Window

Bravo displays two separate areas called windows. The small window at the top of the screen is called the "system window." The system window displays operational information, confirmation of commands, and hints about what the system expects you to type next. When Bravo is first started, the message in the "system window" reads:

READY: Select operand or type command
BRAVO Version 7.1 February 27, 1978

The second line states that Bravo is the name of the system, which version is being used, and the date that version was released.

The first line states that Bravo is "Ready." The Ready message is followed by two possible activities: "select operand" or "type command." The term "operand" need not be intimidating. Select operand simply means "choose the thing you want to perform an operation on." To perform an operation, you need something to perform it on; that something is an operand.

Get Command

Since no text yet exists, there are no operands to select. So, in this state there is only one option: type a command. The command to start with is: "Get a memo form." To begin, type **g** _ for get (it does not matter whether it is upper or lowercase g).

Bravo commands are single character commands. When **g** _ is typed, Bravo supplies the remainder of the word Get. The first line in the system window now reads:

GET: Type or select filename terminated by ESC

The information following Get is a "prompt". A memo form is stored on the disk, and it has a filename. Bravo is asking for the name.

[The term "file" and the term "document" are used interchangeably in this outline--all documents created in Bravo are stored as "files" on the disk.]

In response to Bravo's "Type or select filename" prompt, *type*:

Form.Memo1

The filename will appear *within* the wide black border just below the system window, and a blinking "caret" marks the point at which the characters appear as they are typed. Text appearing within this black border should *always* be a filename.

Bravo says "Type filename terminated by ESC." The Escape Key is used to tell Bravo that a command is finished and that it should now act on the command. When you hit **ESC** (do it now, if you have not already), you will hear disk movement and see a message in the system window: "Reading file." Shortly after that the file will appear on your screen. Bravo will display another READY sign, indicate the size of the file and verify its filename.

B. Document Window

The large (document) window on the screen now contains **Form.Memo1**. The system window will continue to supply information about current actions, while the bulk of the screen is set aside for creating the document. Each time you get a file, it will be displayed in the document window.

C. First Set of Mouse Functions

Up to this point Bravo has been controlled from the keyboard. A second way to control the system is by using a pointing device called the "mouse." The small white box, *usually* placed to the right of the keyboard, is the mouse. It connects to an arrow (cursor) on the screen and allows you to point at (select) the blocks of text to be altered or expanded. [*See "Hints about Using the Mouse" at the end of this section.*]

Single Character Selection

Move the mouse around on the desk and notice the correlation between the movement there and the movement of the cursor (arrow) on the screen. Place the cursor underneath a *single character* on the screen and push the **Red** button. That single character (did you get the one you were aiming at?) will be underlined, indicating that it is "selected." Once selected it becomes the "operand" (remember that term?). The character selected and *only that character* will be affected by any command given.

A selection may be changed frequently; nothing will happen until you stop selecting and give a command.

Move the cursor to another single character and push the **Red** button again. Notice that the character first selected is no longer underlined--you have a "new" selection. Repeat this kind of selection half a dozen times before continuing.

Word Selection

Place the cursor (arrow on the screen) under any character in a *word* and push the **Yellow** mouse button. The whole word will be underlined (selected). Make half a dozen of these word selections before continuing.

Extending a Selection

Select a single character using the **Red** mouse button. Once that selection is made, *hold down the Blue* mouse button and *extend* the selection by moving the cursor along the line, down onto the next line, and finally down to the bottom of the file. Having started the selection with a single character, Bravo "extends" the selection through single characters for as long as the cursor is moved with the **Blue** button held down; when the button is released, the selection will freeze. The **Blue** button can be used to extend in either direction from the original selection point.

Make half a dozen extended selections, starting each time with a single character (**Red** button) selection and then extending the selection with the **Blue** button.

[The areas between the To, From, Subject fields and the Date, Location, Organization fields are separated by a tab. When a selection is extended over these areas, a long line indicating the length of the tab will appear--Bravo considers a tab as a character, and when selected, the length of the tab is underlined.]

Select a *word* using the **Yellow** mouse button. After that selection is made, hold down the **Blue** button and extend the selection. Bravo now extends through whole words--even if the cursor only touches the first character of a word, the entire word will be selected. Make half a dozen of these extended word selections until extending becomes a comfortable operation.

With this set of mouse functions, any block of text can be selected in **Form.Memo1**. Once text is selected, a number of editing operations can be applied to alter it. Before doing that, look at the following summary of the mouse functions just described:

Red	Selects a single character or space
Yellow	Selects a word
Blue	Extends single character or word selection

Hints About Using the Mouse

At the outset, operating the mouse may be somewhat awkward. There are several techniques which may be useful:

1. Pick up the mouse and turn it over. With your finger spin the metal ball around a bit and watch the cursor (arrow) on the screen.
2. When you are reaching too far or have to lean forward, pick the mouse up and move it back to a comfortable distance. The cursor will not move when the mouse is lifted from the table, since movement of the metal ball causes the cursor's movement. It will also make the movement smoother to put a thick piece of paper underneath the mouse.
3. Use your index finger to push a button, and hold the mouse rather firmly with your thumb and middle finger *while* the button is pushed--i.e., be holding on to the mouse while depressing a button; otherwise you will experience difficulty getting accurate selections.
4. Hold the button down *while moving the mouse*. The cursor will follow the movement; when the cursor (arrow) is underneath the character or word desired, release the button and the selection will freeze. You may find that this gives a greater sense of control.

D. Create a Memo--Exercise 1

In order to fill out the memo form on your screen with the text desired, Bravo must first be told *where* to make a change (select an "operand") and then what the change is (type a command). This sequence will be used throughout the creation of the memo--make a selection, type a command.

Turn to Exercise 1 and arrange your working area so both Exercise 1 and this part of the Outline are visible. Exercise 1 will be used as copy for the memo being created.

The first two lines on the screen (*in the document window*) read:

Heading:
Subject

The word "Heading" is a non-printing directive to Bravo. It states that Bravo is to put a heading on the second and following pages of the memo. As things now stand the heading on the second and following pages will be "Subject." So the first thing to be changed is the heading.

Replace Command

Select the word *Subject* using the **Yellow** mouse button. Bravo has a command for deleting selected text and replacing it with other text. The command is replace. With *Subject* selected, type **r** _ for replace.

Replace first deletes the selected text, then allows *any amount* of text to be typed in its place. The text typed to replace unwanted text will begin at exactly the same point as the deleted text began; the blinking "caret" marks that point and continues to indicate where each character typed will appear.

The second page of Exercise 1 contains the heading "Bravo." So, in place of *Subject*, type **Bravo**. When Bravo has been typed, hit the **ESC** Key. The caret will disappear and the next block of text to be edited can be selected. However, while the caret continues to blink, anything typed will appear as text in the document--i.e., no *command* other than **ESC** or **DEL** can be given, and no selection can be made while the caret continues to blink.

The command sequence to **r** _eplace one block of text with another is:

```
Select text
r_eplace
type the text desired
ESC
```

Replace the To, From, Subject, Date, Organization categories. In every case, the command will be **r** _eplace. Using Exercise 1 as a guide, fill out those areas, each time terminating the **r** _eplace command with an **ESC** _____. Then go to the next category to be replaced, select it (**Yellow** button), give the **r** _eplace command, type the text desired, and terminate with **ESC** _____.

E. Typing Paragraphs -- Memobody

The category called "MemoBody" differs slightly from the other categories. Instead of a single word or several words, MemoBody will be replaced with the entire text of the memo. To do that you need to know something about how Bravo formats the text.

Control CR (^CR)

Unlike typing on a typewriter, *carriage returns are not used to break a line*; Bravo will break, format, and right justify the text automatically. However, *you do need to indicate paragraph breaks* to Bravo. This is done with a *Control carriage return*. Holding down the Control key (abbreviated **CTRL** on the keyboard) while typing a carriage return indicates a paragraph break to Bravo. If a plain carriage return is accidentally typed, backspace (**BS** Key) over it and type a ^CR instead.

Use of the Control key in Bravo differentiates characters that simply print on the screen from those that cause a *specific* result. E.g., the carriage return "character" breaks a line and starts a new one directly underneath. A Control Carriage Return starts a new paragraph by opening *uniform* space between each paragraph and maintaining the same formatting. As you proceed there will be a number of control functions--indenting a paragraph, centering it on the page, etc. Most of Bravo's formatting capabilities are applied to *paragraphs*--a block of text entered without a ^CR *is not a paragraph; it cannot be individually selected and consequently cannot be altered with Bravo's paragraph formatting features*.

Okay, select MemoBody (**Yellow** mouse button), give the **r** _eplace command (type **r**), and start typing the text paragraphs--keep typing text without a carriage return until the end of a paragraph, then hit *one* **Control CR**--*hold down the Control key and while it is depressed, hit the carriage return once*. Then

continue typing the next paragraph. The *second paragraph* of the memo is made up of two separate lines of text, but only one *paragraph*. After the first line of text, type a standard carriage return to break the line; after the second line of text, type a ^CR to cause a paragraph break. When the entire text insert is finished (all of the paragraphs that make up Exercise 1), indicate that to Bravo by hitting the ESC Key.

[The length of the memo is not a form of torture; it is long so you can get accustomed to the keyboard, and have an opportunity to use a number of Control CR's. By the time this text is typed, you will have a feel for Control CR's; for the blinking caret; for Bravo's justification of the right margin; and for the text moving up on the screen as new text is added.]

F. Storing a File

In the storing operation, the result should be to: 1) retain **Form.Memo1** on the disk in the "blank" state you initially saw it; and 2) put the memo just created on the disk with a *separate* filename. Both results can be produced with a single command.

To initiate the command for storing the file, type:

P

for **p_ut**, then look at the top line in the system window. It says:

PUT: Type or select filename terminated by ESC

A *new filename* needs to be typed for the memo. Call the memo: **Memo1.Bravo**. The period in the middle of the filename serves as a divider between the "name" of the file and the "type" of file it is. Its name is "Memo1" and it is a "Bravo" type of file. So continue the **p_ut** command by typing:

Memo1.Bravo

The filename typed appears within the broad black border in place of the old filename **Form.Memo1**. Once the new filename is typed correctly [backspace (BS Key) to correct any error], type:

ESC

Bravo will then write the file on your disk: you will hear disk movement; the "document window" will go black; Bravo will flash the message "Writing" in the "system window"; it will indicate the length of the file, verify its filename, and display a new "Ready" sign.

Now both **Memo1.Bravo** and **Form.Memo1** are stored. Both results have occurred simultaneously because:

1. When Bravo was asked to get **Form.Memo1**, a "copy" of the file was displayed on the screen. The "original" has been on the disk throughout the process of typing the memo and can be used again the next time a memo is done. It will be the same form and will be called by the same name.
2. When a new filename (**Memo1.Bravo**) was supplied for the memo, the "copy" of **Form.Memo1** was transformed into an entirely different file which now resides on the disk under a separate filename. The result of this action is that the memo is stored as **Memo1.Bravo**, and the form used to create the memo has not been disturbed--it is on the disk, and is still called **Form.Memo1**.

G. Printing a File - Hardcopy

This section describes printing files on the Ears and Dover printers at PARC. If you are using a Diablo type printer, turn to Appendix B. This Appendix also explains the other hardcopy options not covered here.

In order to print a file (document) created in Bravo, you must *be* in Bravo (which you are), G _et the file you want to print (you already have it), then give the following command:

h

When **h_** is typed Bravo completes the word "Hardcopy". The top line in the system window reads:

HARDCOPY: Type option (C,S,D,N,F,@,E,P,DEL) or CR to confirm

We have at PARC two commonly used types of printers; we must talk about each of them at this time.

The Ears printer accepts for printing documents in *EARS format only*. Similarly, Dover printers accept *only* documents in *PRESS format*. When you execute the Hardcopy command, either *EARS* or *PRESS format* will automatically be printed in the command window, right under the Hardcopy line.

[If the format echoed there is consistent with what you wish and you have already set or had set into your user.cm file a preferred printer acceptable at this moment, proceed to the c _ (or multiple copies) option below. If you are deviating from your preferred format and/or printer, the following explication of the hardcopy procedure will help you complete the transmission successfully.]

If you are sending your document to the Ears printer, your file must be in *EARS format*. If the words "EARS format" do not already appear on the line beneath the Hardcopy line, you must create this format by pushing the

e

key. This action will immediately be echoed by the words EARS format.

Similarly, if you are sending your file to any one of several Dover printers at PARC, your file must be in *PRESS format*, accomplished by pushing the

P

key. This format preference will also be immediately echoed, but this time with the words *PRESS format*.

Hold on to your hat, you are not done yet!

After you have specified the *type of format* for the *type of printer*, you must also specify *explicitly* the *name* of the printer you are sending your file to. This is done with your **@** option which, when executed, will ask for the net address to be confirmed with an **ESC** _____. The net address is just another way of asking for the *name* of the printer. Here is that sequence. You type:

@

The system will prompt you:

Type net address (server name or net#host#), terminated by ESC

which you will surely do. Type the name of the printer to which you are sending your file (e.g., Menlo, Wonder, Palo):

Menlo (*for example*)

and terminate the address (**@**) option with **ESC** _____.

[Remember--it is important to match format with printer. Dover printers accept Press Format. Ears printers accept Ears Format. Once your format has been specified, you still need to name the printer itself. Since you now know which format goes to which type of printer, you can send your file to any printer you choose.]

The only other "option" of concern at the moment is the "c" option--meaning copies. You want two copies. (Typing a **CR** at this point would result in *one* copy being printed.) To get multiple copies, type:

c

Now the system message is:

HARDCOPY: Type # of copies, terminated by ESC

Type:

2

and terminate the copies option with **ESC** _____.

Bravo responds with the "Type option (C,S,D,N,F,@,E,P,DEL) or **CR** to confirm" message again, providing an opportunity to use other options. Right now no other options are desired, so type:

CR

After this carriage return, you will hear disk movement, the document window will go black, a single number will print on the screen--1, then 2--reflecting the number of pages in the document. (The page number printed is attached to the cursor--i.e., a number takes the place of the arrow. If no page numbers are visible, move the cursor until a white number is visible on the black screen.) Finally, Bravo responds with:

READY: Select operand or type command
Last page printed: 2

The Hardcopy command is finished, Bravo is ready to do something else, and it states that a 2 page document has been printed. (It does not confirm the number of copies requested.) The document may be picked up at the specified printer.

The sequence for the specified printer and the multiple copies options to Hardcopy is:

<u>h</u>	begin Hardcopy command
<u>p</u> or <u>e</u>	Designate the appropriate format for printer (<u>e</u> _ars or <u>p</u> _ress)
<u>@</u>	Type location (alias net address) option
<u>name</u>	Type actual name of printer (Menlo, Wonder, Palo, for example)
<u>ESC</u>	Terminate name of printer
<u>c</u>	Type multiple "copies" option
<u>2</u>	Type the number of copies you want
<u>ESC</u>	Terminate copies option
<u>CR</u>	Terminate command, send document to printer

Possible Problems with Hardcopy Command

The sequence presented indicates what will happen if Hardcopy is working normally. However, another possible message is: "**Server Busy - Trying again**". If this message is not followed by: "**Transmission Proceeding**" within a minute or so, hit the **DEL** key, which will terminate the command. Nothing will be printed if the command is aborted with **DEL**, but waiting a few moments and reissuing the hardcopy command will probably be sufficient to get the document printed normally. If you repeatedly get this message, you may send your file to a different printer, remembering to specify format (p _ress or e _ars) and name (@name ESC).

Another message you may get from Bravo is: "**Core space running low. Suggest you P and Q...**"

If this message occurs, it means that there is no more space on the disk to continue carrying out instructions. **P**ut your file on the disk and **q**uit from Bravo; then return immediately, **g**et the file, and reissue the **h**ardcopy command. See the section below on Quitting from Bravo.

Quitting from Bravo

To quit from Bravo, type:

q

for **quit**, and then type a confirming **CR** ____.

Quitting from the Alto

Quitting from Bravo returns you to the Alto Executive--remember that is where you started from. To Quit from the Alto (turn it off, in effect), do exactly what you did in Bravo--type:

q

for **quit**, and then type a confirming **CR** ____.

The screen goes black, the little white squares start dancing around and you can **take a break!**

*Throughout Part I there are several points at which a break is suggested. If you do not decide to take the break, you should nevertheless **q**uit from Bravo each time a break is indicated. You may return to Bravo immediately and continue with the next session. Quitting at the points indicated minimizes the chance of a Bravo failure.*

II. Review

Up to this point a number of operations and specific commands have been described. A list of all of them follows. Make sure they all make sense before continuing.

Load your Disk

Push Run Switch

Boot the Alto

BS Key (delete one character at a time)

DEL Key (Abort a command)

BravoCR (access Bravo from Alto Executive)

Get filename ESC

First Set of Mouse Functions

Red	selects character or space
Yellow	selects word
Blue	extends character or word selection

Replace (delete text and replace it with new text)

Control CR (used for paragraph breaks)

Put filename ESC

hardcopy

<u>p</u> or <u>e</u>	(<u>p</u> _ress or <u>e</u> _ars)
<u>@</u>	
<u>name</u>	(<i>Menlo, Wonder, Palo, etc.</i>)
<u>ESC</u>	
<u>copies</u>	
<u>2</u>	
<u>ESC</u>	
<u>CR</u>	

quit CR (quit from Bravo)

quit CR (quit from the Alto)

Turn to Exercise 2 and arrange your work area so both Exercise 2 and this part of the Outline are visible. Beginning with booting (starting) the Alto, a review of everything covered to this point follows. Proceed through the following list of operations in the order given:

Exercise 2

1. Boot the Alto
2. Access Bravo

3. Get the file **Form.Memo1**
4. Using Exercise 2 for copy fill in the form--select the areas to be replaced, give the **r** _eplace command, type the appropriate text and terminate by hitting the **ESC** key.
5. Type the body of the memo (the shorter version provided in Exercise 2) using Control Carriage Returns between paragraphs.
6. **P**ut the memo on your disk. Call it **Review1.Bravo**.
7. Print (**h** _ardcopy) the memo, use the **p** _ or **e** _ option to specify format, the **@** _ option to specify printer, terminate the printer (**@** _) option with **ESC** _; use the **c** _opies option to get **2** _ copies, terminate copies option with **ESC** _; and hit a **CR** _ to send file to printer.
8. **Q**uit from Bravo and **q** _uit from the Alto.
9. Go pick up the completed document.

Break time.

III. Editing a Document

Turn to Exercise 3. It is a copy of **Memo1.Bravo** with some edits indicated. It has been double spaced to make the edits easier to read, but it is *exactly* the same document. By using the commands already described and adding some new ones, all of the edits indicated can be completed. First, boot the Alto, access Bravo and **g** the document originally created, **Memo1.Bravo** (Type **g** , the filename, and hit the Key).

et
ESC

One of the things now necessary is the ability to move around in a document that is longer than one page. The *maximum* amount of text on the screen is actually less than a full printed page. Therefore, even with a one page memo it will be necessary to manipulate the text in order to control *which part of the memo* is visible at any one time.

A. Scrolling the Document

You are able to move (scroll) through the document by using the cursor on the screen as a marker, and the mouse buttons to indicate how far, and in which direction, the text is to be scrolled.

When the cursor is moved to the left side of the screen, it changes shape in order to visually indicate, in so far as that is possible, the *kind* of result to be expected from the new *context*. Move the cursor to the far left side of the screen--as far to the left as it will go.

On this side of the screen the cursor becomes a thicker, double arrow, pointing up and down. When the cursor is in this shape it indicates an area on the screen called the Scroll Bar. From here the text can be moved up on the screen, making text toward the end of the file visible; or it can be moved down, making text toward the beginning of the file visible.

Red Button - Scrolling Up

The document **Memo1.Bravo** is displayed on the screen. Because it is double-spaced, very little of the text is visible. To move the bottom line on the screen (whatever that line is) to the top of the screen, proceed with the following steps; *do them slowly, giving yourself plenty of time to observe what happens at each stage*:

1. Position the cursor (arrow) on the far left side of the screen so its shape is that of a double arrow, pointing up *and* down.
2. Bring it down directly opposite the last line of text on your screen, keeping it against the left side--still in the double arrow shape.
3. **Hold down** the **Red** mouse button. While the button is depressed, the arrow is still thicker and points in one direction--up. When the button is released, the line of text opposite the arrow will go to the top of the screen. [*Note: while the mouse button is held down nothing will happen;*

if it moves out of the Scroll Bar area, move it back before releasing the button.]

When text jumps to the top of the screen, you may experience some disorientation. This happens because: 1) the change happens very quickly--too quickly to actually track its movement; and 2) frequently a particular position in the text (the beginning of a paragraph, for example) is more difficult to find immediately after the text is reconfigured. This phenomenon will decrease with frequent use of Bravo.

Go through the entire memo, repeating the above operation: Place the cursor on the left side of the screen, double arrow shape, opposite the last line of text on the screen and push the **Red** mouse button. Each time notice which line is opposite the cursor before pushing the **Red** button, and verify that it is the first line on the screen after releasing the **Red** button. In other words, make sure you can accurately predict what will happen each time the **Red** button is released.

Blue Button - Scrolling Down

Having done numerous upward scrolling operations, you arrive at the end of the document, indicated by a dark triangular-shaped character pointing to the left--an "end of file" marker. Return to the beginning using a similar method, different mouse button.

1. Position the cursor on the far left side of the screen, double arrow shape, as before.
2. Bring it opposite the last line of text on the screen, or, if the file is scrolled so that scarcely any text is visible (end of file marker is very near the top of the screen), place the cursor about 3/4 of the way down the screen.
3. **Hold down** the **Blue** mouse button and notice that while the button is depressed, the arrow is thicker and points down. When the button is released, the line at the top of the screen will move down *opposite the cursor*.

Go through the entire document this way until you arrive at the beginning. Each time this operation is performed, notice which line is at the top of the screen *before* releasing the **Blue** button, and verify that the line has come down opposite the cursor position--i.e., do not move the cursor until the change is complete.

The last line of the file was used as a *reference point* in explaining these two scrolling techniques. You need not use the last line; if a move of only a few lines is wanted, position the cursor at the appropriate height along the left side of the screen.

Yellow Button - Relative Scrolling

The **Yellow** mouse button scrolls to a point in the file relative to the top or bottom of the document window and the beginning or end of the file. That is, with the cursor at the top of the document window in its double arrow shape, and just touching the wide black border, pushing the **Yellow** button will scroll the document to the beginning. With the cursor at the bottom of the document window, just touching the boundary line, pushing the **Yellow** button will scroll the document to the end. With the cursor in the middle of the screen, still double arrow shape, pushing the **Yellow** button will scroll to the middle of the document. Any relative point *between* beginning and end can be accessed by placing the cursor closer to the top of the window or closer to the bottom. Try several of these options.

The **Yellow** button is useful with long files for jumping to a *general vicinity*. It is less useful with this memo since one of the other two scrolling techniques can be used to arrive at a more precise point. However, try this method--the document will grow as the Outline continues.

Be *relatively* comfortable with these three scrolling techniques before continuing--go through the document in each direction several times if necessary. These techniques along with the previously learned mouse functions will be used to complete Exercise 3.

Exercise 3

The first eight edits in Exercise 3 can be done with the **r** _eplace command. However, it may be necessary to scroll the text to access the edits.

[Note: While editing the document, text which was visible before a command was given, may disappear the instant you type r _, for example. Depending on the operation performed, Bravo uses some of the space allocated to the screen. When it needs more space, it takes it, meaning that some of the text may temporarily disappear. Scrolling up a few lines will make it reappear, and the document can be scrolled in the middle of a command. So, if this happens, move the document up a few lines until the area you were working on reappears.]

B. Delete Text

Beginning with the ninth edit, "yet" needs to be deleted, but not replaced with anything. The **d** _elete command is activated by typing **d** _ on the keyboard. [Do not confuse typing **d** _ on the keyboard to delete *text* with the **DEL** key to abort a *command*. They are entirely different operations, not at all interchangeable.]

When **d** _ is typed, the selected text disappears immediately. The delete command does not require an **ESC** to complete it.

When a single word is deleted from between two surrounding words, two spaces

will be left between the words remaining. After a word is deleted, the space *immediately following* it is underlined (selected). Therefore, giving another **d**delete command will delete the extra space.

To delete both the word and the extra space with one command, make a **Red** and **Blue** selection (select the *space in front* of the word with **Red** and extend the selection through *the last character* in the word with **Blue**) before giving the **d**delete command.

C. Insert Text

The **i**insert command allows text to be inserted *in front* of the selected text. If you select a space between two words, type an **i** for insert, the blinking caret will appear just *in front* of the space, and the text to be inserted should *begin* with a space. If you select the word itself and type **i** for **i**insert, inserted text should *end* with a space.

If in doubt as to where inserted text will appear, type the first character of the insert and watch where it is placed. If, after seeing that point, it turns out a space is needed, **BS** (backspace) over the character and start again with a space. Use the ease with which errors can be corrected to your best advantage--if typing a character will provide visual context, do it!--it can always be erased.

Once all text to be inserted is typed, terminate the command with an **ESC** _____. The sequence for the **i**insert command is:

Select the character or word you want to insert text *in front* of.
i (for insert)
 Type the text to be inserted; the blinking caret indicates where it will go.
ESC key to terminate the command.

D. Append Text

The **a**ppend command works *exactly* like insert, except that text *is added after* the text selected, and the command sequence is the same, except that an **a** is typed instead of an **i**. Only **a** is typed; Bravo completes the word Append. The edits that require additional text can be done using either the **i**insert or **a**ppend command.

E. Put a File Using the **ESC** Option

With all of the edits finished, **p**ut this *new version* of **Memo1.Bravo** on the disk. When changes are made to a file, a new version of the document must be put on the disk with the edits included. However, this time, it is a new version, not a new file, and *the filename need not be retyped*. Instead, type:

p for Put

and then type:

ESC

Bravo will assume from this command that an updated version of **Memo1.Bravo**, with the edits included, is to be put on the disk.

Using **ESC** in this fashion introduces a new concept about it. In the command above (**p** _ut, **ESC** _) the computer is able to respond appropriately because it *already has* the information it needs. Use of **ESC** in this context signals it to use the information it has since no new information is to be provided.

Having typed **p** _ followed by **ESC** ____, this version of the document will be put on the disk. Now print 2 copies of it.

[Incidentally, always P _ut an edited document before sending for Hardcopy. If anything "untoward" happens in the Hardcopy process, you are in no jeopardy of losing the document: a permanent copy resides on the disk, and if need be the hardcopy command can be reissued.]

Review of Hardcopy Command

The command sequence for specifying format and printer and printing multiple copies of a file is:

h
p or **e** _ (p_ress or e _ars)
@
name (Menlo, Wonder, Palo, etc.)
ESC
c
2
ESC
CR

Break time.

IV. Formatting

You have created a file, put it on your disk, printed it, scrolled through it, and edited its contents. The next two sections describe: use of boldface, italics and underlining for emphasis; adding *paragraphs* to the end of the document; and changing the way paragraphs look--whether they are centered, indented, or right justified.

A. Boldface, Italics, Underlining--Look Command

Character *looks* can be changed with a **l** _look command, followed by indicating the look option desired. Both the look command and the look options are single character commands. The three options for this section are: **b** _ for boldface, **i** _ for italics, and **-** _ for underlining (hyphen for underlining).

Exercise 4

Turn to Exercise 4, and arrange it so both Exercise 4 and this part of the outline are visible.

Get the file **Memo1.Bravo** and select the subject: "Bravo Introduction." Activate the **l** _look command by typing **l** _ . The top line in the system window now reads:

LOOK: Type Look (B,I,-,^,0-9,C,J,N,R,L,F,P,X,Y,?,...)

Bravo confirms the **l** _look command, requests that you type a look, and lists the options--each character within the parentheses represents a possible look for Bravo. The first edit in this exercise indicates boldface. Type **b** _ and the selected text changes to boldface. The **ESC** key is not needed for this command. The sequence for these **l** _look commands is:

```
Select text
look
b (or i _ or - _)
```

The next look indicated is italic. To get characters italicized perform the same command, but type **i** _ for italics. The three looks are **b** _ for bold; **i** _ for italics; and **-** _ (hyphen) for underlining. Go through the document changing the looks as indicated. When you have finished, do a **p** _ut **ESC** , and then **h** _ardcopy the new version of **Memo1.Bravo**.

B. Third Set of Mouse Functions--Line Bar

This section begins with more mouse functions, describes how to return special character looks to normal, then text gets added to the memo in order to cover special character looks *while* typing.

Line Selection

Move the cursor over toward the left side of the screen (slowly). Watch it change from a left-ward pointing arrow to a right-ward pointing arrow. When the cursor is just to the right of where it becomes the up and down pointing arrow for scrolling, the arrow points toward the right. With the cursor in this position, push the **Red** mouse button. The line of text opposite the cursor on the screen will be selected. Make half a dozen of these line selections.

Select a single line of text with the **Red** button. Then *hold down* the **Blue** button and move the cursor down a few lines. Notice that the selection is extended through additional *lines*. Make half a dozen line selections, followed by extending the selection until the combination is comfortable.

Paragraph Selection

Now position the cursor next to a paragraph (it does not matter which line in the paragraph) and push the **Yellow** mouse button. The cursor changes its shape to a "paragraph" symbol, and the entire paragraph is selected. *Hold down* the **Blue** button and move the cursor down the left margin. As the cursor encounters a new paragraph, it also is selected. Make half a dozen paragraph selections, followed by extending the selection to other paragraphs until the combination is comfortable.

These selection techniques will be used in the editing and text entry exercise that follows.

[One likely difficulty is that the cursor will move to the left or right as a mouse button is released. The area to the left of this "Line Bar" area is for scrolling, and the area to the right is for selection of text. Therefore, occasionally when you want to select a line (Red button), you may actually scroll the document "up" several lines, or select a single character within the text since the Red button performs both of these functions depending on its location (context) when the button is released. This problem is more serious with the Yellow button because releasing it in the scroll bar area when a paragraph selection is wanted, may scroll the document rather dramatically--the file may be scrolled to the beginning when only a selection was wanted near the end of the file. If this happens, start the selection again, scrolling the document if necessary. This exercise really does test your ability to hold the mouse steady.]

Exercise 5

Turn to Exercise 5 and arrange your work area so both Exercise 5 and this part of the Outline are visible.

The first two edits require word selection (cursor under the word, **Yellow** button). To change special character looks back to normal, use the **I** ook command, followed by hitting the **CLR** Key. [On some of the newer keyboards, the key we are referring to here is labeled **BW** Key.] So, the sequence is:

Select text
ook
CLR (alias **BW** Key)

Select the word "two" which is italicized. Then type **I** ook for look, and hit the **CLR** Key (or **BW** Key) key. In all cases where the edits indicate cancelling special character looks, this is the process; the only difference will be in the *amount* of text selected and the *way* it is selected.

The third edit indicated requires that two lines of text be changed from bold to normal. Select the first line by placing the cursor in the left margin (within the Line Bar), arrow pointing toward the right and push the **Red** button; then move the cursor down to the next line (arrow still pointing to the right) and push the **Blue** button. The selection should now include both lines of text. Now give a **I** ook CLR command. [The two lines constitute a paragraph and could be selected as a paragraph--one click of the **Yellow** button.]

[Another way to clear character looks is by using the **I** ook command followed by typing the uppercase character for the look being changed--**I** ookShiftB to clear boldface; **I** ookShiftI to clear italics; **I** ookShift- to clear underlining.

Using the **CLR** key clears *all* looks on a character. The shift key method clears only the look specified. For the looks described in this exercise the **I** ookCLR method can be used, though it might be wise to try a couple of the shift key clears--as you continue to use Bravo, this method of clearing looks will sometimes be more appropriate.]

Continue through **Memo1.Bravo** making all the "clear" edits indicated. The end of your document will coincide exactly with the end of the *double-spaced portion* of Exercise 5.

Character Looks While Typing

The single-spaced paragraphs, beginning with: **C. First Set of Mouse Functions** constitute the text to be added to the end of the memo. As text is typed, "Control" characters will be used to make portions of the text underlined, italicized or bold.

To begin typing this additional text, select the last paragraph of the memo *as a paragraph*--cursor on the left margin, arrow pointing to the right, push the **Yellow** mouse button. The cursor will indicate a paragraph selection by changing its shape to a paragraph symbol. With the paragraph selected, give an **a**ppend command. That is, type:

a

Bravo opens a new paragraph block, and the blinking caret appears down the page a bit--the distance of a standard paragraph break, marking the point at which new text will appear.

*[If, when the **a** ppend command was given, the selected text disappeared, scroll up a bit until the blinking caret reappears below the paragraph being appended to.]*

The beginning of the text contains special character looks. The two principles to follow in typing special character looks are:

1. When text is to appear in boldface, for example, *hold down* the Control Key *while* **b** is typed. Nothing will happen on the screen at this point, but the text following **^b** , will appear in boldface.
2. When boldface is finished, hit the **CLR** Key and bold will be "cleared" or turned off. Then continue typing normally until another special character look is required.

The three special character requirements for this additional text are illustrated in the following chart ("^" means the Control Key--i.e., hold down the Control Key while you type the character following ^):

<u>Begin</u>	<u>Character Look</u>	<u>End</u>
<u>^-</u>	Underlining	<u>CLR</u> Key or <u>^Shift-</u>
<u>^i</u>	Italics	<u>CLR</u> Key or <u>^ShiftI</u>
<u>^b</u>	Bold	<u>CLR</u> Key or <u>^ShiftB</u>

Referring to this chart, type the text using Control character and **CLR** Key combinations to get the special character looks indicated in the text. Remember to type a Control CR *between* the paragraphs.

Take your time with these operations; be sure to get a feel for how special character looks work while typing.

If you forget to hit the **CLR** Key and have more italicized, bold or underlined characters than needed, backspace (**BS** Key) to erase the extra characters, hit the **CLR** Key, then resume typing text.

When all of the additional text has been typed, terminate the append command by hitting the **ESC** key.

*[Note: When appending, inserting, or replacing a paragraph, Bravo opens an entire paragraph block; therefore no Control CR is needed after the last paragraph--type Control CR's between the paragraphs, but at the end of the final paragraph, type only an **ESC** . Bravo will automatically make the last block of text a paragraph. If a ^CR is typed after the last paragraph it will result in a blank paragraph at the end of the file. If several blank paragraphs end the file, they may be sufficient to cause a blank page to print. They can be selected and deleted, but you cannot BS (backspace) over a ^CR. When selected a ^CR looks like a space, and it is the last character in each paragraph.]*

Put the file on your disk and continue to call it **Memo1.Bravo** (**P** copies of the document printed.

_ut **ESC**). Then get two

Break time.

V. Review

A list of the operations covered *since the last review* follows, and Exercise 6 provides edits to be used in reviewing these operations.

For section III on Editing a Document:

Scroll Bar Mouse Functions

Red Sends line opposite cursor to top of screen.
Blue Brings top line of text down opposite cursor position.
Yellow Scrolls to beginning, middle or end point in document, relative to cursor placement at top, middle or bottom of document window.

Replace Command

Deletes selected text and allows new text to be typed in its place.
 Terminated by **ESC** ____.

Delete Command

Deletes selected text.
 No **ESC** required.

Insert Command

Opens an area *in front* of selected text where new text can be inserted.
 Terminated by **ESC** ____.

Append Command

Opens an area *after* selected text where new text can be appended (added).
 Terminated by **ESC** ____.

Put ESC

Puts a file on the disk; uses *the same filename*.

Hardcopy Command

Multiple copy option:

h
c
2 (or 200)
ESC
CR

Single copy option:

h
CR

To specify format and printer:

p or e _ (press or ears format)
@name (your desired printer's name)
ESC
CR

For section IV on Formatting:

Look:

b, i, or - bold, italics, or underlining, respectively.

Line Bar Mouse Functions:

- Red** - Selects line opposite cursor
- Yellow** - Selects paragraph opposite cursor
- Blue** - Extends line or paragraph selection

Look CLR (or **BW**__)

To return special character looks to normal

Paragraph A__pend

With paragraph selected, opens a paragraph block *after* selected paragraph where one or more paragraphs can be added.

Terminated by **ESC** ____.
 [No *final* Control ^CR is necessary]

Paragraph I__nset

With paragraph selected, opens a paragraph block *in front* of selected paragraph where one or more paragraphs can be inserted.

Terminated by **ESC** ____.
 [No *final* Control ^CR is necessary]

Paragraph R__eplace

Deletes the text of selected paragraph and maintains an open paragraph block where one or more paragraphs can be typed.

Terminated by **ESC** ____.
 [No *final* Control ^CR is necessary]

Special Character Looks During Typing:

<u>Begin</u>	<u>Character Look</u>	<u>End</u>
<u>^-</u>	Underlining	<u>CLR</u> Key or <u>^Shift-</u>
<u>^i</u>	Italics	<u>CLR</u> Key or <u>^ShiftI</u>
<u>^b</u>	bold	<u>CLR</u> Key or <u>^ShiftB</u>

Exercise 6

There are two operations in this review that have not *actually been used*: 1) Text has been inserted, but *paragraphs* have not been inserted; and 2) text has been replaced, but *paragraphs* have not been replaced. Both of these operations are covered in the review.

Turn to Exercise 6 and arrange your work area so both Exercise 6 and this part of the Outline are visible. Then **g** _et the file **Memo1.Bravo**.

The steps to perform in editing Exercise 6 are listed below, and their numbers correspond to the numbered edits indicated on your copy of Exercise 6. Refer to this guide if you choose. If there is some confusion about *which* command to use, it will indicate the quickest and easiest command for that edit. You may, in any case,

want to refer to it when a paragraph is inserted and when a paragraph is replaced.

1. Select "little," give the **r** _eplace command, type "small" and terminate with **ESC** ____.
2. Select "system" and type **I** _i_ (**I** _ook **i** _talic).
3. Select " and type **d** _ for delete, select second " and type **d** _ for delete.
4. Select "O" and **r** _eplace it with "o", terminate with **ESC** ____ --same procedure for "T" and "C".
5. Use one of the following techniques:

Select "line" and **a** _ppend "in the system window" (the appended text should begin with a space).

Select "states" and **i** _nset "in the system window" (the inserted text should end with a space).

Select the space between "line" and "states" and either **i** _nset or **a** _ppend "in the system window" (text typed will either begin or end with a space, depending on the command used.)

6. Select " and type **d** _ for delete; select the second " and type **d** _ for delete; then select "Ready" and type **lb** _ (**I** _ook **b** _old).
7. Select "two" and type **I** _i_ (**I** _ook **i** _talicized).
8. Select "operand" and type **I** _ CLR Key (**I** _ook CLR).
9. First select "command" and type **I** _ CLR ; then extend the selection *back* through "type" and give a **I** _ook - _ command.
10. Use any of the options described in 5 above.
11. Select "Get" and type **I** _ **b** _ (**I** _ook **b** _old).
12. Make a line *or* paragraph selection of the text and type **I** _ook CLR .
13. See 5 above; use any of the options described there for inserting or appending text.
14. Select the entire line using the **Red** mouse button, then type **I** _ CLR .
15. Select "T" and **r** _eplace it with "When t".
16. Select "you have" and **r** _eplace it with "is"; then select typed and **a** _ppend: , it.
17. Select the paragraph which now begins: "When the filename is..." and give an **i** _nset command; then type the paragraph of text to be inserted. No ^CR is required at the end of the paragraph of text.
18. Select the paragraph beginning "Bravo says..." and give an **a** _ppend command. Then type the text of the paragraph to be added. No ^CR is required at the end of the paragraph of text.

19. Use either of these techniques:

Select "the" and type **d** . There will be two spaces between the remaining words.
One of the spaces will be selected; use a second **d** command to delete it.

Select "the" *and* one space on either side of the word before issuing the **d** command.

20. Select the paragraph beginning "A selection may be..." and **r** eplace it with the two paragraphs given. A `^CR` is used between the two paragraphs that constitute the replacement text, but no `^CR` is required at the end of the last (second) paragraph typed.

VI. More Formatting

Up to this point a document has been created, edited, put on the disk, printed, and emphasis has been provided using Bravo's facilities for changing character looks. In this section altering the *format* of paragraphs is discussed.

A. Paragraph Looks - Editing Existing Text

Bravo has a number of formatting options for specifying paragraph *style*. This section introduces several of the more straightforward means; later sections in the Outline discuss more complicated formatting options.

The formatting commands discussed below are paragraph "looks"--that is, a paragraph is selected and a **l** _ook command applied to it. All of the commands discussed will apply to *entire paragraphs*.

For most forms on the disk, the standard is right justification. The memo form on your disk, for example, automatically provides right justification of text. However, text can be unjustified; it can be centered on the page, and paragraphs may be indented from the left margin.

Exercise 7

Turn to Exercise 7 and arrange your work area so both Exercise 7 and this part of the outline are visible. If it is not already on the screen, **g** _et the file **Memo1.Bravo** which contains the same text as Exercise 7. The text of this exercise incorporates the last set of edits, and it is double spaced throughout.

All of the edits indicated can be performed using a paragraph **l** _ook command, followed by one of three options--**c** _ for centered; **n** _ for nested (indented 1/2 inch); or **ShiftJ** _ for unjustified (because the standard using Form.Memo1 is justification, you will first learn to unjustify, then in the next exercise learn to justify text). [Note that nesting is a preset indent of 1/2", and several levels of nesting are possible--i.e. nest a paragraph twice to get it indented 1 inch, or three times to indent it 1-1/2 inches, etc.] The sequence of the command in all three cases is the same:

Select the paragraph to be changed
l _ (look)
c _ for centered, **ShiftJ** _ for unjustified, **n** _ for nested

No **ESC** key is required to activate these commands; they take effect immediately.

All of the edits in this Exercise are paragraph looks. Either select an entire paragraph with the **Yellow** button, cursor pointing toward the right, or select some part of the text *within* the paragraph. In either case, the paragraph command given will affect the entire paragraph. Try a few of these commands with a word (or single character) within the paragraph selected.

The first paragraph should have justification cancelled. The command is:

lookShiftJ (look unjustified)

The second paragraph needs to be centered. The command is:

lc (look centered)

The fourth paragraph needs to be nested (indented 1/2 inch). The command is:

ln (look nested)

Go through the remainder of the edits, each time selecting a paragraph or some part of a paragraph and issuing the look command followed by the character for the edit indicated--**c**, **ShiftJ**, or **n**. When all edits are finished, do a **p** ut **ESC**, and print the file if you wish.

Break time.

B. Editing Paragraph Looks - Exercise 8

Turn to Exercise 8 and arrange your work area so both Exercise 8 and this part of the outline are visible.

Exercise 8 covers both editing existing paragraph looks, and centering, justifying, and nesting paragraphs *while typing text*.

Centering is obtained by typing **l** ookc to a selected paragraph. Centering is cancelled by typing **l** ookShiftC to a selected paragraph. Notice the only difference is that the "c" is capitalized to cancel centering and lowercase to initiate it. Justification and nesting work the same way--**l** ookj to selected paragraph(s) justifies, and **l** ookShiftJ cancels justification; to nest (indent 1/2 inch) a selected paragraph(s) type **l** ookn; to cancel nesting type **l** ookShiftN. The following chart lists both the method for beginning a paragraph look and for cancelling it:

<u>Begin</u>	<u>Para. Look</u>	<u>Cancel</u>
<u>l</u> ook c	center	<u>l</u> ook <u>ShiftC</u>
<u>l</u> ook j	justify	<u>l</u> ook <u>ShiftJ</u>
<u>l</u> ook n	nest	<u>l</u> ook <u>ShiftN</u>

The second edit requires *two* paragraph commands: first change the paragraph from centered to not centered--**l** ookShiftC is the command. Then for nesting, type **l** ookn. (Note the distinction between upper and lowercase characters in these two commands.)

By referring to the chart and rereading the descriptive material above, perform all the edits indicated in Exercise 8.

When the last paragraph on your version of **Memo1.Bravo** has been edited, begin to read about the second part of Exercise 8, beginning with the single spaced text on page 3.

C. Paragraph Looks While Typing Text - Exercise 8

The paragraphs to be typed are formatted with centering, nesting, and with or without justification. All of these format changes can be obtained *while typing*.

This part of the Exercise requires that additional text be appended to the end of the memo. To do that select the last paragraph in the memo (select it *as a paragraph*), type **a _** for append and Bravo will open a new paragraph block for you to type into--it is the same operation performed in earlier exercises when additional text was added.

The first paragraph is standard text and need only be typed--no formatting commands are necessary. The second paragraph needs to be centered. After typing a Control CR to end the first paragraph, the blinking caret will be on the left margin. Type **^c _** and watch the caret move to the middle of the screen. Now type the centered heading (making it boldface) and terminate the line with a Control CR.

The blinking caret remains in the middle of the screen as if to center the next paragraph. Paragraphs maintain the format of the preceding paragraph until commands are given to alter the format, then the new format remains in effect until changed. At this point centering is no longer required. To cancel centering type **^ShiftC _**--that is, hold down *both* the control key and the shift key while C is typed. The caret will return to the left margin, and the text paragraph can be typed normally.

After a paragraph has been centered, the paragraph(s) following *will not be justified*. Centering cancels justification, and a **^j _** must be typed at some point in the text of the following paragraph in order to restore justification.

The chart below lists the commands for obtaining the paragraph looks required to complete the remaining text. The up arrow indicates that the character following ^ is a control character--hold down the control character while the character following ^ is typed.

<u>Begin</u>	<u>Para. Look</u>	<u>Cancel</u>
<u>^c</u>	centered	<u>^ShiftC</u>
<u>^j</u>	justified	<u>^ShiftJ</u>
<u>^n</u>	nested	<u>^ShiftN</u>

Refer to the chart above and reread any of the descriptive material necessary while doing this exercise. When the additional text is finished, do a **p** and print the file if you wish.

Break time.

_ut ESC ,

VII. Miscellaneous Features

The following features may be helpful in a number of applications. No exercise accompanies the description; however, use the Memo1.Bravo file for practicing these features.

A. ESC to Repeat a Command

The **ESC** key can be used to repeat the effects of the last command. So, the command **ispace ESC**, to insert a space between two words that are run together, can easily be repeated if there are several instances of the same edit. Change the selection for the second instance and type only **ESC**. Bravo repeats the entire command: **i _space ESC**. **ESC** to repeat the last command works with *most* Bravo commands. Remember, though, that it only pertains to the *last* command given, and it will be executed *exactly* as the command was given the first time. Use this feature with several kinds of edits to get a feel for its usefulness. Insert a string of text, then select another point in the document and type **ESC**. When the same text is to be inserted in two separate places, use **ESC** to repeat the insert, rather than retyping the text.

B. Control W--Word Erase

The **BS** key has been used to correct typing errors. Control w erases words. Each time **^w** is typed (hold down the Control key while typing w), one word will be erased. Try using it to erase a few words. Bravo counts a word as everything between two spaces. Therefore if the typing error being corrected is lack of a space between two words, and **^w** is typed to erase only the second word, Bravo will erase both words since there is no space between them to indicate two words.

C. Undo Command

The Undo command, issued when Bravo *is in a "Ready" state*, reverses the effects of the previous command. It will *only work on the previous command* and only *if the selection has not been changed*. So, if you give a **l**ook **b**old command, for example, and decide boldface is not desirable, type **u** for undo, and the text will appear just as it did before the look bold command was given. The Undo command works with "most" Bravo commands, but only for the *last* command given and only if the selection has not been changed. Try a few of them. An Undo can also be undone, which will restore the results of the initial command--issue a command, then do several **u**ndo's; you will *see* how it works.

D. Everything

To quickly select the entire document, type:

e

for e_everything. Any command given following an e _everything command will be applied to the entire document.

E. Window Clear

Occasionally, you will want to work on one document, print it and then work on another document. It is not necessary to leave Bravo and return in order to switch documents, but you cannot have two separate documents in *one* document window.

To *clear* the document window of text and simultaneously clear the filename from the black border, type:

wc

for w_indow c_lear. You should p_ut the file on the disk before issuing this command. However, if the file has not been put, Bravo will ask for a confirming CR before honoring the command. At that point you may **DEL** out of the w _indow c _lear command and put the file on the disk. When the document window has been cleared, you may issue a g_et command to access the next document.

[Note: if the editing session has been a lengthy one (an hour or more), quit from Bravo and return before accessing another document.

F. Normalize Command

The n_ormalize command locates and displays selected text in the document. When selected text disappears as a result of a scrolling operation, a quick way to get it back is with n _for normalize. Typing n _when Bravo is in a "Ready" state will cause the first line of selected text to appear at the top of the document window. If a word was selected, the line with that word in it will appear at the top of the screen. This command will only work when Bravo is in a "Ready" state--waiting for a command. *It cannot be used to make text visible if it has disappeared as a result of a command you initiated and are still in the middle of.*

Everything Normalize (en _)

Combining the *e* _everything and *n* _ormalize commands will result in the document being scrolled to the beginning. Normalize puts the first line of *selected material* at the top of the screen; if the entire document is selected, the first line will be placed at the top of the screen. This command only works with Bravo in a "Ready" state.

G. Manual Page Breaks and Keeping Text Together

Bravo fills up a page and breaks the page whenever the bottom margin is encountered. Consequently, the page may be broken inappropriately. When that happens, either a manual page break or a command to keep blocks of text together may be needed. When a heading appears at the bottom of the page alone, and the text following begins on the next page, a command to keep heading and text together is appropriate. When the next block of text begins a new section--appendices, bibliography, references, etc.--a manual page break is appropriate. It is best to use manual page breaks only at points where a new page is *always* wanted, and keep commands for blocks of text which need not start a new page *unless* a new page is required to keep them together. Both options are available with the following two commands.

Manual Page Break

In order to break a page at some particular point, a control character is entered into the text which is interpreted as "page break" by Bravo. It should be appended to the last string of text you want to appear on the page. It is entered into the document by typing:

^L

Typing a Control S makes the preceding character a control character, and Bravo reads a ^L as a page break. The resulting character in the file looks like an "I". It will be visible in the document while editing, but will not print when the file is sent to Ears or the Diablo printer. It can be selected and deleted like any other character. This ^L breaks the page *after* the line of text in which ^L appears. If it is typed at the end of a line of text, that line will remain on the current page, the *next* line will begin a new page.

Keeping Text Together

A document with subject or section headings will require that several lines of text be kept together in order to avoid having a heading appear at the bottom of the page alone.

To keep lines of text together, a **l** _ook **k** _eep command is used, followed by a distance for the amount of text to be grouped. For text *with a heading* this distance is 80 points; for *text only* paragraphs, the distance is 40 points. To set an 80-point keep on a heading paragraph, *select the paragraph containing that heading*, and give the following command:

Iook
keeP
80
ESC

No change will be visible in the paragraph following this command, but it will go with the document and be honored when it is printed. If the paragraph is a text only paragraph, but it is breaking with only one line of text at the bottom of the page, the command is:

Iook
keeP
40
ESC

A Iook keeP 80 set on a heading paragraph means that *at least two lines of text* will be kept with the heading on one page, or the entire block (heading and text paragraph) will be sent to the following page. A Iook keeP 40 means that at least two lines of a text paragraph will print at the bottom of the page or the entire paragraph will be sent to the following page.

For the moment, do not worry about what points are: the 80/40 distances given will generally suffice for heading and text paragraphs, or text only paragraphs.

VIII. BravoBug

While you are working in Bravo, a copy or *transcript* is kept of each command given. This transcript can be replayed and stopped at a desired point. If Bravo crashes in the middle of an operation, you may return to Bravo, (entering with **BravoBugCR** instead of entering normally with BravoCR), and replay the session up to the point where the failure occurred. So, if Bravo fails all is not lost--the work can usually be recovered.

A number of circumstances might cause Bravo to crash: a "bug" in the program which the right combination of operations triggers; the Alto is accidentally booted; or there is a power failure. In any of these cases, the Bravo session may be replayed and the file saved. Running BravoBug saves the results of the *current* editing session; assuming the file has been put on the disk at least once, the file itself is not in jeopardy, only the results of the editing session that was interrupted.

If bravo crashes due to a program bug, it will go into a system called SWAT. This is the most frequent kind of Bravo failure, and it provides some information about the crash, the most interesting part of which is the command number at which the program failed. Make a note of this number before beginning the replay. SWAT's message reads:

Bravo problem at command #--

With that number, the session can be replayed up to, but not including the command at which it failed. Then the replay can be terminated and the file put on your disk, thus saving the work done during the session. The sequence of operations and commands are:

1. Bravo crashes and the top of the screen identifies a program called SWAT. Make a note of the command # it says Bravo crashed at, then boot the Alto.
2. At the Alto Executive level, type:

Bravobug

and then a **CR** ____.

(Be sure to type **Bravobug, not Bravo--if you enter with BravoCR, the opportunity to replay the session will have been lost.)**

3. There is about a 30 second delay before Bravo begins the replay. Then it gets the file and begins to replay each of the commands given during your last Bravo session. Once the file has been read in and you see that the commands are being replayed,
4. Hit the space bar once. This will stop the replay.
5. Now Bravo can be told where the replay is to be stopped. The command for doing this is "break before command #." To activate it, type:

b

The top line in the system window now reads:

REPLAY: Type break command # terminated by ESC

Type the SWAT command # and terminate with **ESC** ____.

6. After the command # and **ESC** ____ are typed, the message in the system window reads:

REPLAY: Type blank, P,T,Q,S

The options are blank (space-bar) to replay a single command, P for proceed, T for terminate, Q for quick, and S for slow. Bravo has been given a command number to stop at; now it should "proceed" to that command. Type:

p

for "proceed." Bravo will continue the replay up to, but not including, the command # given, then will stop and say:

REPLAY: Stopped before Command #--

7. Now the replay can be terminated by typing:

terminate

followed by a **CR** ____.

8. Once this is done, you will get a "Ready" message from Bravo. *Put the file on your disk, quit from Bravo, reenter Bravo from the Executive level (this time with BravoCR), get the file and continue the editing session.*

Leaving Bravo and reentering frees up space on the disk and begins a "new" transcript. Giving Bravo ample disk space minimizes failures.

When no command number is available from SWAT, or the number given is incorrect, use the following commands to control the replay:

<u>space</u>	Stops the replay. After the replay is stopped, hitting another space will replay <i>one</i> command. Hitting it again, will replay one more command, etc.
<u>p</u>roceed	Resumes the replay at full speed.
<u>b</u>reak before command #	Even without a command number from SWAT this break feature can be useful, but you will have to guess how many commands were given by mentally replaying the session. For example, give it a break # which is ten commands down the line, then reevaluate the

situation and give another break point. Each time Bravo stops the replay, it will tell you at which command number it has stopped. Remember that Bravo must be told to proceed (type **p** _) after the **b** _reak # is given.

terminate**CR**

Do not terminate the replay until no more commands need to be replayed. Once the replay is terminated, **p** _ut the file on your disk, leave Bravo and return normally to continue the work that was interrupted.

slow

This command will slow down the replay. The text characters go in one at a time. It makes for a very slow replay. You can speed it up again (quick is its standard pace) by typing,

quick

To make the text go in all at once.

The last two commands listed here--slow and quick--you may or may not need. Quick is never needed unless slow has been used since quick is Bravo's standard speed.

Make a point of doing several replays--boot the Alto in the middle of an editing session if need be--so that an interruption with a document you care about does not cause a panic. In fact, *now* is the best time to do that. Practice some of the miscellaneous features described in Section VII, then boot the Alto in the middle of the session and run **BravoBug**--there may be few times when you have less to lose.

IX. Alto File Directory

Before reading this section, quit from Bravo and return to the Alto Executive level where all of the directory operations described in this section are performed.

Files on your disk are kept in a directory which can be interrogated. There are several conventions for doing that, and there are also conventions for naming files.

To get your Alto Directory displayed on the screen hit the **TAB** ____ key. Do that now.

The top third of the screen displays a series of file names. They proceed in alphabetical order from left to right *across* the screen, *not* from top to bottom. At the bottom of this list there is a question:

More?

Type **y** to see more of the filenames; type **n** to discontinue the directory command. Type **y** a couple of times until there are no more files to look at.

In this form your directory is somewhat difficult to decipher because all system files are lumped with your own files. There are several methods for separating your files from system files.

A. * Option

The Alto file structure is: **name.extension**. Note the dot (period) between name and extension; it *must* be typed. Your memo is called: Memo1 and its extension is Bravo. The whole filename, then, is **Memo1.Bravo**.

You can specify a particular *set* of files by using a * to take the place of either the name or the extension. Type:

***.Bravo**

and then hit the **TAB** ____ key. A list of every file that ends with .Bravo will be displayed on the screen.

There is a limit of 39 characters for a filename. Abbreviated filenames are useful both because of this limit, and because typing long filenames each time you get or put a file in Bravo is time consuming. However, when the abbreviations are so clever and descriptive that they cannot be remembered a week later, this * option will help track them down.

B. Naming Conventions

Grouping your files with one of several naming conventions will facilitate accessing them quickly.

If .Bravo is used as an extension, all .Bravo files can be accessed with the *.Bravo option. If further differentiation is needed extensions can be used to indicate something about the kind of document it is. That is, use .Memo for all the memoranda created, .Letter for all letters, .Report for all reports, etc. Then when you need to see that group of files on your directory, either as a reminder of a filename or for some other operation, the * option described above can be used to get only that group of files displayed--*.BravoTAB _____; *.MemoTAB ; *.LetterTAB ; *.ReportTAB , etc.

Bravo accepts only the *exact* filename when you ask it to get a file. A discrepancy of only one character will cause it to print a message to the effect that it cannot find the file. If files are grouped by extension, it will be easy to interrogate your directory (at the Alto Executive level) and quickly verify the name of the file.

C. Deleting Files from Your Directory

Files that are no longer useful--that is, unlikely ever to be needed again--can be deleted from the disk. Realize, however, that once all versions are deleted the file is gone forever; there is no way to get it back.

There will be no immediate need to delete files from your disk. Until quite a few have been created, or your disk begins to get full, do not worry about deleting. Once you decide to delete files, the command is given while in the Alto Executive. It is:

>del filenameCR

Type **del** (the characters d e l), *then a space*, then the **filename** to be deleted, then a **CR** to activate the command. The filename will be listed and deletion verified.

If you did the first *review* in this outline, it can be deleted in order to try this command--it was called **Review1.Bravo**. To delete it, type:

>del Review1.BravoCR

When "cleaning up" your disk becomes a regular occurrence, look at the *Alto User's Handbook* and read the manual for the system called DDS, which has facilities for both interrogating your directory and deleting files from it. In the early stages of your Alto/Bravo experience, the naming conventions described above and this means of deleting files will suffice.

D. ESC, CR, and TAB--Where, When, and What Happens

The commands requiring one of the above terminators have been listed, but it may be somewhat confusing to keep in mind where and under what circumstances **CR** is used instead of **ESC**, or **TAB** instead of either **CR** or **ESC**.

ESC

The Escape key is most frequently used for operations in Bravo. Most of the commands are terminated with **ESC** _____. However, there are exceptions:

quitting from Bravo requires a **CR** instead of **ESC**;
 sending for hardcopy requires **CR** instead of **ESC**;
 terminating a Replay requires **CR**.

You may find other exceptions to the rule; this is not intended to be an exhaustive list. When in doubt about which one to use, look at the top line in the system window. Bravo generally displays which response it expects to hear.

CR

Uses for **CR** in Bravo have been mentioned above. **CR** is used in the Alto Executive for accessing systems like Bravo--**BravoCR** _____-- and for activating a command to delete a file from the disk--**del filenameCR**_____.

TAB

The **TAB** key *as an activator* is used solely in the Alto Executive and then only in connection with getting your directory of files displayed on the screen. The **TAB** key is used to get your entire directory displayed, and the ***.Bravo** option is terminated with a **TAB**. It is used in Bravo to set tabs, and to type tab characters into text, features not covered until Part II.

E. Other "Forms" on Your Disk

There are a number of forms on your disk like the form used for doing a memo. Use one of these forms whenever possible to get your work done. Use of forms makes formatting easier and provides a consistency of format which is harder to achieve if a file is started "from scratch."

In order to see which forms are on the disk, use a derivative of the ***** option. All of the forms on your disk are called Form, and then followed by .memo, or .letter, or .SeminarNotice, etc. Since there is one constant (Form), all instances of something called Form can be accessed by typing:

Form.*

followed by hitting the **TAB** _____ key. A list of all the forms on your disk will be displayed, and the *extension* will make it clear what the form is used for.

All forms work much like the memo form. The blanks are filled in using the replace command, paragraphs are separated with Control Carriage Returns, and formatting commands may be used while typing or editing.

The letter form contains a note where the body of the letter will appear explaining that a look keep 175 is attached to the paragraph. This is the same principle as the look keep 80/40 option discussed for keeping text together, and it is there in order to keep the body of the letter together with the signature area following it. However, if the letter is long, this 175 keep distance will have to be changed. It should appear only on the *last* paragraph of the letter. First delete it from the *first* paragraph with `I _ook k_eep 0 _ESC`; then put it on the *last* paragraph with `I _ook k_eep 175 _ESC`--in both cases select the text *as a paragraph* before issuing the command.

The other forms on your disk are *more or less* decipherable. However, both Form.Report and Form.TableofContents will be quite confusing until later sections in this Outline have been read and the features used.

If there *is* some confusion about one of the forms, do not hesitate to ask questions of fellow Bravo users. Getting quick verbal answers from people who have already used a facility will save time, and you will find that they are happy to assist you.

X. Caveats/Miscellaneous Information

A. Caveats

Bravo responds to single character commands which eliminate typing out entire words; however, it also means that unwanted commands can be activated easily--in fact, it is almost impossible to use Bravo without doing this. There are a great many single character commands in Bravo, many of which have not yet been discussed. *When a command you do not want or do not recognize has been activated, hit the DEL Key to abort the command. If the command activated is one that takes effect immediately (like delete), give an undo command to reverse the effect of the command.*

The time to use DEL or undo is *immediately after a command has been activated*. That means paying close attention to messages displayed in the system window. When a command is activated, Bravo displays a message confirming the command. Once past the point of activating the command, something meaningful in that command context may be typed, and you may pass a point at which DEL or undo can be used to correct the problem.

To reinforce the risk involved in not watching the system window, consider the following:

The word "edit" needs to be inserted in a text string.

Instead of typing **editESC**, "edit" is typed without first typing **i** for insert.

The result is:

e Command to select everything in the file.

d Command to delete everything in the file.

i Activate the insert command (finally).

t "t" is accepted as the text insert.

ESC The insert command is terminated.

The file now on the screen contains a "t".

After **d** is typed, an **undo** command would restore the file unchanged.

After **i** is typed, neither **DEL** or **undo** will restore the entire file. At this point, getting the text back requires retrieving it from one of Bravo's temporary storage areas. The following series of commands:

```

buffer
i (numeral one)
ESC
replace
ESC

```

will restore the entire file. See Section XIII on Moving/Duplicating Text.

When some situation occurs which you do not understand, there is no great rush to correct it. Sit there for several minutes and sort out what happened; one clue is the message at the very top of the screen. Bravo's command messages print the name of the command activated in capital letters--APPEND will be the first word on the first line in the system window after typing a **a** for append. That information provides a starting point. Having made some determination about what happened, select one of the possible responses offered in Section B, below, as a corrective measure.

B. Trouble Summary -- Levels of Response

Problem: An unwanted command is activated and *noticed* before any change to the document has occurred.

Response: Hit the **DEL** key to abort the command. Bravo displays a "command terminated" message when this response is acceptable.

Problem: An unwanted command is activated and is unnoticed until an unwanted result has altered the document. No other command or selection has yet been made.

Response: Type **u** ndo. For "most" Bravo commands undo will reverse the action of the *last* command.

Problem: An unwanted command(s) is activated and executed. **U**ndo either does not work on that command, or does not have sufficient effect because two or more commands have been executed.

Response: Do a replay of the session up to a point prior to the catastrophe; then put the file on the disk, leave Bravo, return and start a new session. This response assumes that fixing the file would take longer or be more trouble than a replay.

C. Miscellaneous Information

1. The length of a Bravo session should not exceed an hour or so, and it is wise to **p** ut the file several times over the space of an hour. Bravo keeps a transcript of all commands, and the transcript uses some of the space on the disk which Bravo needs to function. Periodically, quit from Bravo, reenter and begin the editing or text input again. Be sure to **p** ut the file before leaving, however.

Overstaying your welcome in Bravo, may result in the message: "**Suggest you P and Q**" (Put and Quit). When you get this message *immediately* **p** ut the file, quit from Bravo and reenter again. This action starts a new

transcript and frees space on the disk used by the previous transcript.

[Do not attempt to do just a few more edits before responding to this "suggestion" from Bravo. Bravo will not, in any case, allow more edits, but by repeatedly issuing commands, you may pass a point at which you can quit. Bravo will almost always Put the file, even when it will not honor a quit command. If Bravo will not respond to a quit command, but the file has been put on the disk, you can boot the Alto to get back to the Alto Executive and from there begin a new Bravo session.]

2. The length of any Bravo file should not exceed 35,000 characters. A document longer than 35,000 characters should be broken into two files. The length of a file can be checked each time Bravo is entered, and each time the file is **p**ut on the disk. At both times, Bravo verifies the filename and indicates its length. (35,000 characters varies depending on the text, but with single spaced, fairly dense text, it is in the neighborhood of 10-12 pages.)

Go on to later sections if you wish; however, it will be easier to read and understand them if you have used and are comfortable with the information presented in Part I. The later sections provide less explanation, concentrating more on step by step sequences of commands and brief explanations of their result.

Part II

Conventions:

What the user types will appear in boldface and underlined.

System messages to the user are indented and appear in boldface.

<u>CR</u>	=	Type a Carriage Return
<u>ESC</u>	=	Type the ESC Key
^	=	An up arrow preceding a character indicates a Control character--i.e., the Control Key is <i>held down while</i> the character following ^ is typed.

This part of the Outline is a continuation of Part I for those users who need or want to use more of Bravo's features. It assumes that you have used and are comfortable with all features described in Part I. It is not accompanied by prepared exercises; the emphasis is on a step-by-step presentation of commands, and explanations are considerably more brief than they were in Part I.

Though no exercises accompany Part II, it is *strongly suggested* that each feature be *used* since no amount of explanation can duplicate the information transmitted by doing. The **Memo1.Bravo** file used for exercises in Part I is an ideal practice file. It or any text file of similar length (2-3 pages) will suffice.

XI. Formatting Continued

The sections following describe some of Bravo's more involved editing and formatting facilities, those that were not described in Part I and are not necessary until the user needs to change character sets (fonts), to control the placement of text with more precision, to offset text, and to interrogate Bravo in order to obtain point or inch positions for text placement.

A. Character Looks While Typing

This section describes super and subscripting characters; the following section covers changing the character set (font) in which text appears.

Superscripting

To superscript a character(s), type **ControlShift^** before the text to be superscripted and the **CLR** key following it. [In this case ^ should be taken literally--i.e., it refers to the up arrow character on the keyboard, rather than indicating the Control key. Hold down *both* the Control key and the Shift key and type "^".] Typing:

ControlShift^2CLR

superscripts the number 2; any text appearing after **CLR** will *not* be superscripted. If Control^ is typed as a lowercase character--if the shift key is omitted--subscripting will be the result. See the next paragraph.

Subscripting

To subscript a character(s), type **Control_** before the text to be subscripted and the **CLR** key following it. Thus, **Control_2CLR** subscripts the 2. (Hold down the Control key and type _, then type a 2 normally, then hit the **CLR** key to cancel subscripting.)

Once super or subscripting has been initiated with Control^ or Control_, any amount of text can be typed, and it will continue to be super or subscripted until the **CLR** key is typed.

Super and Subscripting - Editing Existing Text

To apply super or subscripting to existing text, use a **look** command followed by **^** or **_**. These looks are most easily cleared with a **look CLR**. They *cannot be cleared* with a shift key character since both characters reside on the same key--therefore, **ControlShift_** or **lookShift_** will result in superscripting. However, **look u_p 0_ESC** will cancel super or subscripting without cancelling other looks. See G. Offsets Up and Down, for further information.

B. Font Changes

A variety of fonts (character sets) can be obtained easily and quickly. Appendix A provides a summary sheet which lists the *number* of each font *on your disk*, gives a sample of the character style and size, and provides correspondence tables. The fonts are numbered 0-9. Zero is the font used by Bravo unless another font is specified--it is the "default" font. [The term default refers to a number of definitions that are "preset" in Bravo and that will consistently occur unless changed by the user. There is a default left and right margin, a default font, etc., and they will automatically be in effect unless changed.]

In this outline, only the fonts already on your disk, numbered 0-9, are discussed. If a font that is not on your disk is needed, consult the *Alto User's Guide* and/or talk with someone who can assist you.

While Typing

To change fonts while typing text, hold down the Control Key and type the number of the font desired, then type the text which is to appear in that font, then hit the CLR key to restore standard font for subsequent text. An example:

^{^1}This is an eight point font which is better than CLR a ten point font for footnotes.

Editing Existing Text

To change the font style of *existing text*, use a **l**ook command followed by the number of the font. That is, select the text to be affected, type **l** for look, followed by the number of the font--for the 8 point font above it would be **l8**.

Below is a chart illustrating how to get superscripting, subscripting and font changes, both while typing text and when editing existing text.

<u>Look :</u>	<u>To Begin:</u>		<u>To Cancel:</u>	
	Typing	Editing	Typing	Editing
superscript	<u>CtrlShift^</u>	<u>l_ookShift^</u>	CLR	<u>l_ook CLR or lu0</u>
subscript	<u>Ctrl_</u>	<u>l_ook_</u>	CLR	<u>l_ook CLR or lu0</u>
0-9 fonts	<u>Ctrl#</u>	<u>l_ook#</u>	CLR or ^0	<u>l_ook CLR or l0</u>

When CLR is used to cancel a font, the text will always be returned to font 0--the default font, and CLR simultaneously clears bold, italic, super or subscripting, etc.--i.e., after typing the CLR key text will appear in font 0 with *no* special character looks remaining.

[Note: Font 2 is a 24 point font, containing only 4 characters, all uppercase. They are XERO, meaning that Font 2 is used only for obtaining a replica of the Xerox logo. This font can only be used for these four uppercase characters; any other character will produce a black rectangular bar, indicating that a character has been typed which Bravo cannot represent. Delete (BS over) these bar characters and begin again with another font or with the correct uppercase characters in font 2.]

Look ?

When using a number of fonts, it is easier to interrogate Bravo, rather than look up font numbers. Typing **I** `_ook?` to a selected character will cause Bravo to display a message in the system window describing the character--its font number and any special looks, such as italics, attached to it.

C. Points, Inches, Centimeters

Several brief references have been made to points. It is time to say more about them since the following sections deal with point and inch specifications. However, it is not necessary to figure out distances to use them in Bravo--when a distance specification is needed, you may ask Bravo what the distance is by pointing to a place on the screen.

A point is a unit of measurement in the printing industry--72 points equal 1 inch. Points are used to measure character size, leading (spacing) between lines of text, and leading between paragraphs. Bravo uses this unit of measurement in its formatting operations. It has been using points all along, but you have not had to be aware of them. In the formatting functions described below, points will be more obvious because Bravo displays them, and because you have the option of typing them as a specification.

Beginning with Section E distance specifications will have to be made. Points are being mentioned here because the term is used extensively for the two commands described in Section D. However, for these two options no distance specification is required; the commands described in Section D are of the *preset* variety.

D. Paragraph Looks While Typing

In addition to centering, justifying and nesting paragraphs *while typing* (discussed in Part I), there are two methods for controlling the amount of space *between* paragraphs (the amount of white space that constitutes a paragraph break). These paragraph looks are particularly useful *because* they can be used *while typing text*. They are control characters with preset distances, just as nesting is preset at 1/2" (36 points).

When a larger break (more white space) is needed to separate headings from the text following, one of these commands can be used to obtain it. The default paragraph break in Bravo (the one in effect for the *forms* on your disk) is 12

points. **^o** doubles this break since it provides an additional 12 points of leading--it adds 12 points to whatever is already set.

^o (*Control o*)

Controlo or **l_ooko**, meaning "open" will produce an additional 12 points (1/6") of leading between paragraphs. If a larger paragraph break is desired, typing **^o** (lowercase o) *at any point in the paragraph* will produce 12 additional points of white space preceding that paragraph. If editing existing text, the command is **l_ooko**. This additional leading can be cancelled by typing **^ShiftO** while typing text, or **l_ookShiftO** when editing existing text.

^q - *Control q*

A similar option for paragraph leading is available using **^q**, but the amount of space is cut in half--**^q** provides 6 additional points of leading. It is exactly the same as **^o** in terms of the way it is input--**^q** to start it while typing; **^ShiftQ** to cancel it while typing; and **l_ookq** to a selected paragraph(s) to start it while editing; **l_ookShiftQ** to selected paragraph(s) to cancel it when editing.

So, with the combination of **^o** and the preset default for paragraph leading, 24 point breaks can be obtained between headings and surrounding text, and a standard paragraph break can be restored with the use of **^ShiftO**. An example of how this works follows:

This is the end of a text paragraph with 12 point leading.**^CR**

^o*This is a heading line with 12 additional points of leading added, causing a double break between this paragraph and the one preceding it.***^CR**

This is the first paragraph following a heading; the **^o** typed above has been left in effect, making the break preceding this paragraph 24 points--the same as that preceding the heading paragraph above.**^CR**

This is the second**^ShiftO** paragraph following a heading; its leading has been returned to 12 points by the use of **^ShiftO**.

^q works just like **^o**, but provides half the space. If a 24 point break is too large, use **^q** instead of **^o** for an 18 point break. If a 12 point break between paragraphs of text is too small, use **^q** to expand the space to 18 points. These two control characters can be used as much as possible for special formatting needs, and they will eliminate having to go back and edit in the desired format.

E. Paragraph Looks with Distances Specified

Section D described the last remaining paragraph looks which can be put into a document *while typing*. The formatting commands described in this section cannot be applied *except as an editing function to existing text*. They provide great flexibility for placing the text on the page since an exact position can be specified. The tradeoff is that they are more complex to use. So, the following looks apply to entire paragraphs, and in each case they must be followed by a distance in points or inches. First, there is a description of their purpose, then a description of how to use them.

Before attempting to use the commands following, read the rest of Section E and all of Section F to discover both what these commands do and how to make them do it.

*Margins*look:

<u>left</u>	Controls all lines along the left margin of a paragraph (default left margin is 85 points--1.2").
<u>right</u>	Controls all lines along right margin of paragraph (default is 527 points--1.2" of white space on right).

*Paragraph Format*look:

<u>first</u>	To indent the first line of a paragraph. A <u>look left</u> command overrides <u>look first</u> because it affects <i>all</i> lines of a paragraph.
<u>paragraph</u>	Indents second and following lines of a paragraph. A <u>look left</u> command overrides <u>look paragraph</u> because it affects <i>all</i> lines of a paragraph.
<u>x</u>	Sets the amount of leading (space) between lines of text. Default is 1 point for single spaced text. Double spaced text can be gotten with <u>look x 6</u> . Leading <i>between</i> 1 and 6 points provides less densely printed lines.
<u>y</u>	Sets the amount of leading between <i>paragraphs</i> . Need not be used if ^o or ^q satisfy the requirement--they are 12 and 6 points, respectively. Maximum paragraph leading by using <u>looky</u> is 63 points. If more than that is needed, you will have to insert a blank paragraph(s) and set its y distance, or see the section on vertical tabs in Part III.

The sequence for all of these commands is:

Select a paragraph or paragraphs
look
left (for example, but **r,f,p,x,y** work the same way).
distance
ESC

F. Determining Distances on the Screen

You do not have to know anything about the distance of one point or calculate distances in either points or inches in order to use these facilities. At the precise point at which a distance is needed, Bravo will display it. After typing **ll** (look left) to a selected paragraph, the mouse can be used to point to a position on the screen, and Bravo will display its distance. The distance is displayed in the top, left-most set of squiggly brackets in the system window. The left most set of brackets displays the distance in points, the middle set of brackets displays it in inches. Once the distance appears in the left most set of brackets, hitting the **ESC** key will cause that distance to be applied to the paragraph(s) selected.

The "distance" referred to is measured from the *left edge* of an 8.5 x 11" sheet of paper. 0 is the far left edge; 612 is the far right edge. The distances specified to Bravo are for horizontal positions between 0 and 612 (usually between 85 and 527--the default left and right margin settings). Exceptions to this distance rule are x and y which are vertical measurements, though still given in points.

There are a variety of methods for determining the distance desired. The four methods given below should provide ample options.

Many of the methods for determining distances require the use of a "copy" or "secondary" selection. Secondary selections are made exactly like the primary selection, but they appear with *dotted* underlining. Secondary selections occur in the middle of a command, allowing the user to point to and thereby interrogate Bravo about specific points on the screen.

1. For the paragraph looks: **l _eft, r_ight, f_irst, p_aragraph**, the desired distance can be obtained by using the mouse buttons in one of the following ways:

After typing: **l _ookl_ or l _ookr_ or l _ookf_ or l _ookp_**

Red selects a character, and the horizontal position of that character will be displayed within the brackets of the system window. So if you want the left margin to line up with some particular character in the paragraph above, select that character, Bravo will read its position and display it; hitting **ESC** will apply that distance to the paragraph(s) selected.

Yellow Use the yellow button to select a paragraph. If you want a paragraph(s) to have a left margin, for example, which is the same as another paragraph, type **ll _** and then make a secondary selection of the paragraph it should match. Bravo will read that paragraph's left margin setting and display it--hitting **ESC** will cause the left margin of the paragraph being changed to be reconfigured with that setting. This principle works the same with **lr _**, **lf_**, **lp_**.

Blue

If there is no character to select, and no paragraph to get a setting from, or if either option is inaccurate, hold down the blue button and move the cursor to *any* horizontal point on the screen. Bravo will constantly update and display the position of the cursor. When the Blue button is released at a particular point, the selection will freeze and its distance will be displayed in the system window. Hitting the key will cause Bravo to use the displayed distance for the paragraph setting indicated-- left, right, first or paragraph.

ESC2. *y or x Settings*

When setting either the amount of white space between paragraphs (*y*), or the amount of white space between lines within a paragraph (*x*), only the **Yellow** mouse button is functional. Following a **l** *ook x* or **l** *ook y* command, neither the **Red** or **Blue** mouse buttons have any effect--they both provide *horizontal* distances and Bravo knows of no horizontal distance when either *y* or *x* are being set.

After typing either **ly** *__* or **lx** *__*, you may make a secondary selection *of the paragraph to be changed*; Bravo will display its *x* or *y* setting. Points can be added to or subtracted from it, the new distance can then be typed and the command terminated with **ESC**. Or you may select another paragraph in the document (scrolling to it if necessary) which already has the *x* or *y* setting desired; Bravo will read the distance and hitting **ESC** will adopt that distance for the paragraph(s) being changed.

Standard distances for *x* are 1 point = single spacing; 6 points = double spacing, settings between 1 and 6 provide less densely printed lines. Some experimentation with *y* will have to be done, but a good rule of thumb is 12 points between text paragraphs, and 24 points separating headings from the text paragraph following.

3. *\ to Obtain Default Setting*

If you want to change a paragraph to its default setting, but are unsure of the default, type **** (backslash, not /). Bravo will display the default setting for the look being changed--85 points for left margin; 527 points for right margin; 1 point for leading between lines of text; 12 points for leading between paragraphs; 85 points for both first and paragraph. To adopt the default distance displayed, hit **ESC**. (The backslash option, like the secondary selections described above, works *after* you have typed **l** *ook l* *_eft*, **lp** *_*, **lf** *_*, etc.)

4. *Type the Distance*

Some emphasis has been placed on using the distance Bravo displays by hitting the ESC key. However, you always have the option of typing the distance; it will appear in the left most set of brackets in points, and its inch equivalent will appear in the middle set of brackets. Typing ESC following the number will apply that distance to the look being set.

If you decide to type in the distance, the format to use for points, inches, centimeters is as follows:

144	A number without a decimal point and no indication of measurement following it, is assumed by Bravo to be in points.
2.0 2" 2.0"	A number with a decimal point or followed by " is considered to be in inches.
5.1cm	cm must follow the number if you are specifying centimeters, and there is <i>no space</i> between the number and cm--e.g., 4cm.

Look ?

Typing **l _ook?** to a selected *paragraph* will cause Bravo to display all settings on that paragraph--its left and right margins, its y setting, its x setting, and a number of other possible paragraph settings. Bravo may not have room to display all the information; *scroll the system window* up to see if there is more information about the paragraph.

Plus or Minus Options

Bravo will add to or subtract from an existing distance on the screen. If you want a paragraph indented 1 inch, for example, do not worry about adding 72 points to the current setting; type **l _ook+1" ESC** (look left + 1 inch) and 1 inch will be added to the margin of the paragraph. Plus and minus options work with *most* Bravo commands that require a distance.

G. Offsets Up and Down - (**l _ook u _p, l _ook d _own**)

The offsets discussed in this section require that a distance be typed after indicating the offset desired (up or down). These offsets supplement super and subscripting, and need not be used unless the preset offset is inadequate. When a character is superscripted (Control[^]), or subscripted (Control_^), the offset is 4 points. If this is too much or too little, the offset **u _p** or **d _own** option can be used to assign the distance desired.

These offsets can only be applied to existing text; they cannot be used while typing text. So, to offset text *up* 6 points, for example, select the character(s) to be affected and give the following command:

```
look
up
6
ESC
```

Offsetting text down works the same way, except that **d** own replaces **u** p in the command.

Hints about Offsetting

An offset distance will be *measured from the baseline of text*. So, if you superscript a character (4 points), and decide that 6 points would be a better offset, that offset cannot be increased to 6 with the command **l** ook**u**p**6**ESC. Bravo will count from the baseline and offset the character(s) 2 points, meaning that it will actually move *down* 2 points from the initial offset of 4 points. The way to increase or decrease an offset using this command is either to give the total offset--**lu6** ESC (look up 6)--or use a + option with the distance specified--**lu+2** ESC (look up + 2).

Bravo adds leading to text lines in order to accommodate offset text. Therefore, use the smallest offset possible in order to avoid wide gaps between lines of text.

H. Miscellaneous Look Commands - Formatting/Formatting Aids

The looks described below provide several methods for formatting a document and for ascertaining what it will look like when printed.

Look All - (**la** with secondary selection)

When several *levels* of formatting are used, switching between them can be facilitated by asking Bravo to make one paragraph or series of paragraphs look like a paragraph set up elsewhere in the document. This can be done with a **look a** ll command.

Use of the **l** ook a ll command allows a "secondary" (dotted underline) selection to be made in order to identify the paragraph whose formatting is to be copied. Often the document must be scrolled to locate a paragraph that contains the desired format. You can scroll through the document as much as you like after typing **la** (look all); nothing will happen until a secondary selection is made and terminated with ESC. When the ESC key is hit, formatting from the copied paragraph is applied to the paragraph(s) being changed. The sequence of the command is:

Select the paragraph(s) *to be changed*
la (look all)
 Scroll the document if necessary
 make secondary selection of paragraph to be matched
ESC

Look Same - (ls __ with copy selection)

Look same works exactly like **l__ook a_ll** except that it applies to *character style only*--no paragraph formatting will be changed as a result of the look same command. If, for example, text is both in another font and in boldface, and a separate block of text is to match the text, select the block of text to be changed, give the **ls __** (look same) command, make a secondary selection of the text it is to match, followed by **ESC**. The block of text to be changed will be altered to match the font and the boldface of the secondary selection.

Look Visible

The command: **l__ookv** (lowercase v) initiates a "visible" mode in which characters that usually cause white space, are made visible--i.e., tabs, spaces, carriage returns, control carriage returns.

This command is useful when: 1) it is unclear whether text contains a series of spaces or a tab; it is unclear whether there is a control carriage return or an ordinary carriage return, etc., and 2) there may be a problem with the file which you cannot immediately identify without being able to see the characters involved.

To get rid of visible mode, type **l__ookV** (uppercase V).

Look visible pertains only to selected text--a paragraph, one line, or the entire document can be made visible, depending on the amount of text selected when the command is issued. It is possible to edit, store the file, print it, etc. while text is in visible mode. When cancelling visible mode, all of the text affected should be selected before typing **IV** __.

It will be fairly easy to determine the visual representation for spaces and tabs, but the difference between carriage return and control carriage return requires careful attention. A control carriage return differs from an ordinary carriage return only in that it has a line across the top of the CR. Do a look visible to text that contains both and note the difference.

Look Hardcopy (lh __)

The number of characters on a line when the document is displayed on the screen does not exactly duplicate the number of characters there will be on a line when the document is printed. In printed form, a line of text will contain more characters than it does on the screen. The **l__ook h__ardcopy** command duplicates what the document will look like when printed.

Use of the **l _ook h_ardcopy** command will affect the entire document, and the character set (font) used to duplicate the printed document is quite a bit smaller than the font generally displayed. Editing with this font involves a certain amount of eyestrain. However, an area of the text can be edited to ensure that lines break properly. Editing in hardcopy mode is also considerably slower--particularly if there are numerous font changes in the document.

To cancel hardcopy mode, type **l _ookH_ardcopy** (note the uppercase H to stop it and the lowercase h to start it). If you experience difficulty getting out of hardcopy mode, type **e _** for everything before giving the **l _ookH_** command.